

Plus: The Top 25 RVs for 2022!

Keystone Arcadia 370RL 'RV of the Year'



RV ENTHUSIAST

NORTH AMERICA'S PREMIER HOW-TO RV RESOURCE



Do-It-Yourself RV Renovations

Limited Budgets — Unlimited Inspiration

Awning Upgrades

- **Replacing Patio Awning Fabric**
- **Adding an Electronic Motion Sensor**

January 2022

QUALITY = *Stressless Freedom!*



LANCE

REV GROUP

Built to Last | Lightweight

Off-grid Capable

Heated Enclosed Holding Tanks

Ready to Roll Anytime & Anywhere

Lance Campers, social distancing since 1965. Visit lancecamper.com to locate your nearest Lance dealer and the RV of your dreams.

RV ENTHUSIAST

NORTH AMERICA'S PREMIER HOW-TO RV RESOURCE

January 2022

Volume 2, Number 1

INSIDE



16

Let There Be Shade — Again

If you own an RV it probably came equipped with a patio awning — an addition that undoubtedly makes lounging outside much more pleasant. Unfortunately, time, the sun and the wind will eventually combine to destroy the majority of awning fabrics. If yours has seen better days, here's how to replace the fabric.



21

Drawing to a Close

Ever set up camp, take a walk to explore your new surroundings — and return to discover you'd forgotten to retract the patio awning, now thrashed by sudden wind? You probably longed for an electronic motion sensor upgrade. Well, do it. They aren't expensive — or tough to install, as you'll see.



52

Roof Water IncurSION?

Skylights have been part of the RV's roof landscape for many years, offering additional height in showers and natural lighting. For the most part, these plastic domes have a good lifespan (unless, of course, you collide with a low structure or tree limb), but the seal that ensures a tight fit on the roof can deteriorate over time — and leak.



59

Cold Again

Today's RVers have a multitude of choices when it comes to keeping food cold and fresh, from 120-volt AC-powered residential units to a growing number of 12-volt DC-powered refrigerator/freezers. Sometimes, though, the best choice for replacing a bad unit is to simply opt for absorption refrigeration.

DEPARTMENTS



6 On the Road

Change is in the air — from the possibilities of electrified (battery-powered) RVs to new inroads being made to RV service and technicians.



8 News and Notes

NPS "fee free" days for 2022, a look at some far-reaching new RVs, award-winning products from Lippert, and a lot more.



14 Technically Speaking

Readers are stymied by freezing refrigerators, "perpetual" roof leaks and "fussy" tumblers in RV entry locks and baggage doors.



65 Making Memories

Touring Northwestern British Columbia, Canada, will bring you back in time when the Aboriginal culture ruled this vast region.



On The Cover

Janelle Payne and her sons, Maxwell and Rexton, relax on the patio and within the former garage of the 2006 Jayco Octane toy hauler travel trailer extensively renovated by Janelle and her husband, Chad. Photo by Chad Payne.

64 Advertisers Index



37

Top RVs for 2022

RV Enthusiast editors were invited by the staff of *RVBusiness*, the industry's premier trade magazine, to participate in its annual selection of the "Top Debuts" for 2022 — including the selection of the magazine's prestigious "RV of the Year." Here are our selections.

Special Section!



Design Cents



28

The Ideal Project

Inspiration for RV renovation can come from just about anywhere — and in the case of DIY fanatics Janelle and Chad Payne, that just happened to be the next-door neighbor who gave them an old 1974 Ideal travel trailer. To say it was made new again would be an understatement.



30

Toy Hauler Haven

We went back to the Paynes a second time — because we couldn't believe what they accomplished with this 2006 Jayco Octane toy hauler travel trailer. The former garage (now a masculine, woody "den") and galley are amazing — but the bathroom pushes this well into the "Wow!" category.



33

Family Time

For Kelsey and Sebastian Paz, the decision to remodel their damaged 2017 Jayco Eagle fifth wheel before touring the country with their two children was an easy one. Whether they intended to go as far as they did with their now "boho chic" RV is anyone's guess — but there's no arguing with the results.

EDITORIAL STAFF

PUBLISHER - BOB LIVINGSTON

(800) 830-9729 EXT. 3

BLIVINGSTON@RVEMEDIAGROUP.COM

EDITOR - BRUCE HAMPSON

(574) 584-4616

BHAMPSON@RVEMEDIAGROUP.COM

TECHNICAL DIRECTOR

BILL GEHR

(805) 340-5015

BGEHR@RVEMEDIAGROUP.COM

SOCIAL MEDIA DIRECTOR - JIM MAC

(800) 830-9729 EXT. 7

JMAC@RVEMEDIAGROUP.COM

ART DIRECTOR - MIKE ACCUARDI

MACCUARDI@RVEMEDIAGROUP.COM

BUSINESS OFFICE

RV ENTHUSIAST/RVE MEDIA GROUP INC.

26362 DOUGLAS AVE., ELKHART, IN 46514

ADVERTISING

ADVERTISING DIRECTOR

SUE SEIDLITZ

(800) 830-9729 EXT. 2

SSEIDLITZ@RVEMEDIAGROUP.COM

SUBSCRIPTIONS

To subscribe electronically, log onto: www.rventhusiastmagazine.com, click on the "subscribe" icon and follow the prompts to add subscriber and payment information. Alternately, you may also mail to: *RV Enthusiast* Subscriptions, 26362 Douglas Ave., Elkhart, IN 46514. Subscription rates: Subscriptions for U.S. and Canada: \$9.99/one year, \$18.99/two years. Premier membership subscription rates available upon request.

CORRESPONDENCE

Correspondence is invited from subscribers and readers of *RV Enthusiast*. Technical inquiries relating to RV function, maintenance, repairs and/or upgrades should be directed to Technical Director Bill Gehr at the above email addresses. Letters to the Editor should be directed to Editor Bruce Hampson at the above email address. Personal replies cannot be sent due to the volume of mail received. By forwarding letters to *RV Enthusiast* magazine, the author consents to allow letters to be published at the discretion of *RV Enthusiast* editors. Letters may be edited for brevity and clarification.

AFFILIATE NOTICE: RVE Media Group LLC provides links to vendors and products, such as an Amazon Associates account, for informational purposes, but that may provide a commission if you purchase from that link. We often label these links with language that provides transparency if the destination is an advertiser, affiliate, or partner. Products are often provided to RVE at little/no cost for editorial testing purposes by vendors/suppliers. Under no circumstances does this affect the results of the test or install as published in *RV Enthusiast*. Sponsored content is identified as such directly on the content.

PRIVACY POLICY: Our complete privacy policy can be found at <https://rventhusiast.com/privacy-policy/>



THE GAS ENGINE GAME CHANGER

**THE REVOLUTIONARY
LIQUIDSPRING®
SMART SUSPENSION
JUST GOT SMARTER**

A Gas Coach equipped with a Four-Corner Solution from LiquidSpring will rival the driving experience historically reserved for a diesel pusher.



TOTAL COMFORT & CONTROL

- Luxury Car Ride
- Sports Car Handling
- Instantaneous Response



LIQUIDSPRING®
SMART SUSPENSION

Get smarter and learn more at: liquidspring.com or call us at: (765) 474-7816

©2021 LiquidSpring, LLC

Changes Are in the Air

By Bruce Hampson

It's been hypothesized by folks a lot smarter than me that “the only constant in life is change.” Actually, the maxim is first credited to the Greek philosopher Heraclitus — I know, I had to search it. Amazing, when you think about it, that some guy who passed away almost 2,500 years ago could so succinctly sum up contemporary life.

Change is definitely a constant in the RV industry. Innovation has always ruled, but if I had to choose a time where such advancements really took center stage in the RV arena I'd probably look to the Great Recession. Consider: this year, the industry is expected to ship more than 600,000 RVs to North American dealers; in 2009, as the recession was cresting, it shipped just 165,700. With time on their hands, OEMs went about redesigning many of the products they were selling. In fact, an argument could probably be made that the industry went from producing units it wanted to build to manufacturing RVs the public wanted to buy.

And it has never looked back. If you want a glimpse into the current state of RV technology, read “Top Debuts for 2022” in this issue. Put together in conjunction with the editors of *RVBusiness*, it highlights more than two dozen top towable and motorized RVs for the new year.

Where will this evolution end? Who can say? A few short years ago, no one really thought we'd ever see an electrified (battery-powered) RV. Then company engineers put on their “thinking caps” and things began to happen. At this month's Florida RV SuperShow in Tampa, Florida, THOR Industries will unveil a concept travel trailer equipped with a prototype proprietary high-voltage electric drive system to support tow vehicles.

Developed in conjunction with ZF Friedrichshafen AG, a Germany-based global technology firm, the eTrailer System is expected to maintain — and possibly extend — the nominal range of an electric vehicle when towing a trailer. Electric vehicles experience a significant reduction in range when towing any load, but a trailer equipped with the eTrailer System would be capable of moving by utilizing its own power. Through its sophisticated technology, components and sensors, the trailer's drive moves the trailer at the same speed of the tow vehicle, allowing an electric tow vehicle to pull the trailer with minimal loss of range.

The technology also is said to have the potential to boost fuel efficiency of conventional tow vehicles. By helping propel the load, these tow vehicles would burn less fuel — and thus benefit from extended range.

This is well beyond the “what if?” stage. In July 2021, THOR companies' Erwin Hymer Group and Dethleffs demonstrated the capabilities of this technology by using an electric Audi e-tron Sportback to tow an eTrailer System-equipped travel trailer prototype from Germany to Italy. The eTrailer System enabled the tow vehicle to pull the trailer a distance of 386 km (approximately 240 miles) through the Alps on a single charge — with power still remaining in the eTrailer System as well as in the electric tow vehicle. Audi's stated range for the tow vehicle is 393 km (244 miles).

Will we eventually see a battery-powered motorhome? No doubt. The technology exists; it's just a matter of application and expense. It's said that the RV industry has always been about 20 years behind its automotive counterpart, but that's no longer true. Technology — and consumer demand for cutting-edge products — won't allow it.

Of course, not all change has to be fueled by technology. For example, the current growth of RVing has laid bare one of the industry's main drawbacks: A lack of qualified service technicians. That's why, in 2018, the RV Industry Association's board of directors created the RV Technical Institute (RVTI): to train the next generation of service techs. In 2022, RVTI's goal is to recruit and train at least 1,000 new technicians.

In the meantime, some dealers are taking things into their own hands. National Indoor RV Centers (NIRVC), a five-location dealership group (Atlanta, Dallas, Las Vegas, Nashville and Phoenix) recently announced a partnership with Newmar Corp. that circumvents many of the stumbling blocks to timely service. Among the program's directives: no more OEM authorizations needed before technicians start work; the stocking of the top 200-300 fastest-turning parts at each NIRVC location; and the warehousing of more expensive parts at NIRVC's Texas facility — where Southwest Airlines has daily flights to each NIRVC location and parts can be flown to the necessary site (with a goal of under 24 hours). And, Newmar has committed the relocation of a senior service person to that same Texas facility who also will travel to any NIRVC location to help cut through “red tape” encountered with any supplier.

There's a lot more to the NIRVC program. Suffice to say, it's the type of system that, adopted by other dealers and manufacturers, cannot help but reduce what the industry refers to as RECT — Repair Event Cycle Times — and improve consumers' opinions of the industry.

I'd be remiss if I didn't acknowledge that change has also affected *RV Enthusiast*. As we enter our second year of publishing what we feel is the most capable and qualified technical “how-to” magazine in the RV space, we've brought a new face on board as a few staff editors have opted to pursue new challenges. Effective with this issue, Bill Gehr is the Technical Director of *RV Enthusiast* — and to say he brings a wealth of experience to the position would be an understatement.

Gehr started his 50-year career in the RV industry when he went to work for an Airstream dealership. After the gas shortages in the '70s, he decided to start his own business and founded Bill's RV Service in Ventura, California, where, after several years in business, he met *RV Enthusiast* Publisher Bob Livingston. At the time, Livingston was the technical director for *Trailer Life* and *MotorHome* magazines — he would eventually become group publisher of both titles — and together the duo worked on literally hundreds of technical editorial projects for the publications while becoming great friends. Gehr also eventually joined Livingston on the TV show “RVtoday,” filming a number of hands-on projects. After retiring, Gehr headed out full-time in his fifth wheel and toured 39 states while continuing to write technical articles for the two magazines.

Let me put it another way: Livingston has more technical “know-how” than any RV journalist alive today...and when he's stymied by a problem, Bill Gehr is the guy he goes to for advice. Now, Gehr will share that accrued knowledge with *RV Enthusiast* readers.

Yes, the only constant in life *is* change. Just don't blink, or you might miss it. **RVE**



A NEW JOURNEY BEGINS

Just like every great road trip, sometimes life takes you in a new direction. At Heartland, we've launched a new journey to make our RVs better than ever. We've doubled down on seeking out the highest quality materials, creating fresh and inviting interiors and giving every unit the kinds of finishing touches you'd find in a new home.

Every unit goes through a top-to-tails inspection with a quality assurance expert—in fact, we have an 89,000-square-foot facility dedicated to walking each RV through a series of checklists to ensure it works exactly as it should. And with updated floor plans incorporating features our customers love best—spacious bathrooms, designer kitchens, furniture meant for cuddling up together—we're confident every trip in a Heartland will be a happy one.

After all, that's what RVing is all about: hitting the road with people you love, having adventures, making memories. So when you buy a Heartland, just focus on taking the journey of a lifetime. We'll take care of the rest.



Experience the all-new Heartland online and check out 360-degree model tours, detailed floor plans, all-new features, galleries of updated decor and more.

Just visit HeartlandRVs.com.



Sylvansport, Zeus Partner on All-Electric RV

Most RVers — especially those with a sense of adventure — are familiar with the innovative camping trailers and gear manufactured by Sylvansport (sylvansport.com), including the company's Go and Go Easy trailers. However, the Brevard, North Carolina-based company has also entered into a partnership with Zeus Electric Chassis Inc. (zeuselectricchassis.com) to collaborate on new-product development aimed at their shared vision of a “more sustainable outdoor adventure experience.”

Zeus already builds the electric chassis, and it can be configured to a broad range of applications with limited customization. Zeus has prioritized the vocational work truck market, but significant opportunities exist for vehicle electrification across other niche markets, including motorized recreational vehicles. The collaboration with Sylvansport marks the next potential strategic market niche within the broader markets that Zeus is targeting.

Sylvansport envisions a new line of all-electric RVs with new technologies to eliminate emissions, reduce waste, provide water recycling solutions, and



more. By designing RVs with more efficient use of power, water and other resources from the ground up, the companies intend to make off-grid camping, or “boondocking,” more accessible in the future.

Wondering what the future of RVing may look like? Visit sylvansport.com/leading-the-charge/ for a sneak peek at some of the initial visionary design concepts for the Sylvansport all-electric RV.

AEONrv Pushes the Off-Grid Envelope



Every RV company ever founded was based on ideas people had for “building a better mousetrap” — some succeeded, others didn't. But most did bring something new to the table, helping to push the evolution of RVing to where it is today.

Now, a pair of former Silicone Valley executives are entering the fray with a new concept for an off-grid Class C motorhome that looks to push the envelope

in self-sustaining camping. Founded by Jim Ritchie and Lars Severin, AEONrv (aeonrv.com) introduces a host of unique attributes. In fact, the company acronym stands for “All-season, Electric, Off-road, New and modern RV.”

Built around a Ford Transit all-wheel-drive 1-ton cutaway chassis, the running gear has been upgraded for off-road use with BFGoodrich KO2

tires, Van Compass two-inch lift kit, heavy-duty springs and custom Falcon shocks. The “house” is built using insulated fiberglass-reinforced panels developed by a company that used them primarily for refrigeration trucks. The sidewalls are 2 inches thick, while the roof, floor, and front and back walls are 3-1/4 inches thick. The company utilizes thermal transfer construction techniques and industrial-grade adhesives — the AEONrv uses no mechanical connectors — that produce a box said to be stronger, lighter, better insulated and more flexible than traditional RV construction methods.

The off-grid-capable RV also features insulated doors and acrylic dual-pane windows; even the storage doors boast 1-inch-thick thermal insulation. Everything — from batteries and water tanks to the 65-cubic-foot pass-through storage garage — is heated. The grey-water tank is insulated with 1-inch high-density foam, and to further ensure against it freezing, coolant lines from the engine — also used to heat the marine hot water tank — provide passive heating; there's also a holding tank heater.

The 22-foot, 9,500-pound GVWR AEONrv also features an onboard water-filtration system, 58-gallon fresh-water tanks, dimmable LED lighting, locking door between cab and living quarters, 24-volt DC compressor refrigerator/freezer, solid-surface countertops, one-burner induction cooktop (two burner unit is optional), dual wardrobes, three-point seatbelts at the dinette (with adjustable Lagun table) — there's even a pull-out pantry. The uniquely designed bathroom at the entry of the unit doubles as a "drawing room" to dry gear.

Powering everything is a 24-volt DC system with 700-watt solar array, Victron 100/30 MPPT controller, 8.2kWh Battleborn LiFePO4 battery pack (upgradable to 13.8kWh) and 3,000-watt Victron energy inverter/charger.

At \$194,500 (plus fees and taxes), the new AEONrv isn't cheap, by any means — but it does check all the boxes — including many you didn't know you needed.



Get Your Reservations in Early

As many RVers have discovered, the Achilles's Heel to the current boom in camping is the mad dash of campsites — and until new parks currently under construction come online, it's probably going to get worse. In fact, according to a December 2021 report by Yogi Bear's Jellystone Park Camp-Resorts (camp-jellystone.com), advance reservations for 2022 have increased by 76% compared to the same time the previous year. Many Jellystone Park locations were completely sold out during the peak vacation season.

"Guests are booking earlier than ever



before because they are worried they won't be able to reserve their cabin or RV site for their desired dates if they wait," said Trent Hershenson, vice president of marketing. He noted that some Jellystone Park camp-resort locations have opened reservations earlier than usual to accommodate guest requests.

"The popularity of family camping and glamping was growing rapidly even before the pandemic, but then it really took off," Hershenson said, noting that 45% of Jellystone Park summer 2021 guests were first-time visitors. "The ongoing uncertainties involving COVID are another reason advance

bookings are up so much," he added. Research conducted earlier this year for Jellystone Park showed that moms, who are typically the family vacation decision-makers, consider camping to be a safer choice than other types of vacation trips.

BE READY FOR ANY CURVES THE ROAD MAY BRING

EXACT CENTER

Steering Stabilizer

for Motorhomes, buses, trucks and Jeeps

NEW from ROADMASTER

- An immediate and dramatic improvement in handling and control.
- Prevents rut-tracking, lane wander and fuzzy center.
- Improves steering safety & comfort while reducing driver fatigue.
- Allows for limited backing up with a towed vehicle.
- Gives a true 'Exact Center' for a sports car like feel.

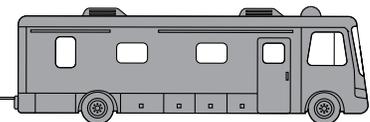


Available for multiple applications

TRUCK OR JEEP

TOWED TRUCK OR JEEP

MOTORHOME



Since 1970

Outstanding Customer Service

Award-Winning Design



CALL US

Time Tested • Time Proven
800-669-9690
roadmasterinc.com



BEST PRODUCTS - BEST PRICES - BEST TECHNICAL SUPPORT

DRASTICALLY IMPROVE YOUR RV DRIVING EXPERIENCE!

KONI



RIDE

SAFE T PLUS
Steering Control



SAFETY



POWER



ROADMASTER

SWAY



TIGER TRAK

WANDER

WWW.URVP.COM
800-417-4559



Go RVing Expands 'First-Timer Tool Kit'

Go RVing®

GO RVING WITH CONFIDENCE

First-Timer's RV Tool Kit



New to the RVing lifestyle and have a lot more questions than answers? Go RVing, the RV industry's marketing and "consumer awareness" campaign, launched its "First-Timer's Tool Kit" in 2020 to help the surge of new RV owners who were rapidly joining the RV community and looking for resources on how to properly use their new RVs. The first batch of resources covered the basics: towing, driving a motorhome, RVing with kids and pets, what to look for when buying an RV, and some other basic tips.

In 2021, Go RVing expanded the new-to-RVing content by 300%, providing more in-depth how-to information for new buyers. This new content (gorving.com/this-is-rving/activities/first-timers-rv-tool-kit) draws on the expertise of trusted social media influencers, media partners and the RV Technical Institute to provide the know-how that new RVers are searching for. The resources have expanded to include guides to water and sewer hook-up, electrical systems, propane, regular RV maintenance, campground set-up, essential tools and gear and much more. Intuitively designed to get consumers they

YOU DRIVE

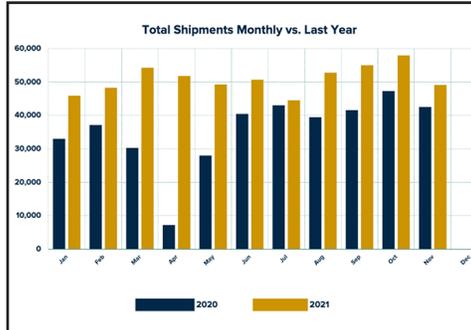
Hensley will get you there



HensleyMfg.com
800-410-6580

need in the easiest way possible, the video hub currently contains more than 80 videos and has been optimized for better SEO, search, and easier navigation for consumers.

RV Shipments Eclipse 550,000 Units



With a month still to go before the dust settles on 2021, RV wholesale shipments to dealers — a prime indicator of the health of the industry — have surpassed 550,000 units. According to a December report from the RV Industry Association (RVIA), total RV shipments ended the month with 49,135 units, a new record for the month of November and an increase of 15.6% compared to the 42,513 units shipped during November 2020 (the previous record for November).

Year to date, 559,743 RVs have been

produced — the most RVs ever built in a single year. In fact, while towable RV shipments outnumber motorized nearly 10 to 1, both segments are up this year by nearly equal percentages (43.6% for towables, 43% for motorized). The RV industry remains on pace to build more than 600,000 RVs in 2021 and 2022, according to the latest RVIA forecast.

Tiffin Launches Super C Allegro Bay

Tiffin Motorhomes has long held a well-deserved reputation for quality and craftsmanship in the Class A market — which is where the company focused its efforts for most of its existence. In recent years, however, the Red Bay, Alabama-based builder has branched out — first to the Class C market with the Wayfarer and then with the Class B Cahaba.

Now, add a “Super C” to the mix.

In December, Tiffin released the new Super C Allegro Bay. Based upon a S2RV Freightliner Custom Chassis with full-time no-spin single rear axle to minimize or eliminate wheel spin in wet and adverse

conditions, the 39-foot, 4-inch coach offers a 33,000-pound GVWR and 12,000-pound hitch rating. Two floorplans are currently offered, the 38 AB (rear bedroom) and 38 BB (rear bath).

The Super C Allegro Bay comes standard with Truma AquaGo Comfort instant water heater, 150-gallon freshwater tank, Spyder Multiplex control system, 8kW Onan Quiet Diesel AC generator, four AGM extended-cycle batteries (upgradable to lithium) with a 2,000-watt inverter, full body paint, keyless entry and residential refrigerator. Other features include a manual release valve for the rear air suspension, LED lights, a sloped dash for better visibility and too much more to list — all in keeping with the Tiffin reputation.



Call to schedule an appointment or on-line at revrvserviceandrepair.com

EXPERT RV SERVICE & REPAIRS

GET READY FOR YOUR NEXT ADVENTURE WITH EXPERT RV SERVICE & REPAIR.

FOR ALL MAKES, MODELS AND TYPES OF RVs.

Schedule on-line at REV RV SERVICE AND REPAIR.COM

EAST COAST
 REV RV Service & Repair
 1420 Patterson St.
 Decatur, IN 46733

WEST COAST
 REV RV Service & Repair
 91186 N Coburg Industrial Way
 Coburg, OR 97408



NPS Announces 'Entrance Fee-free Days'



Sunset eruption of the Great Fountain Geyser, Yellowstone National Park. Photo courtesy NPS/Neal Herbert

The National Park Service will have five entrance-free days in 2022. The free admission days are designed to encourage discovery and visitation of the country's variety of national parks. With at least one in every state, national parks are accessible places to visit to refresh body, mind and spirit.

The free entrance dates for 2022 are:

- January 17
- April 16
- August 4
- September 24
- November 11

Visitors are encouraged to begin their trip to a national park with a stop at [NPS.gov](https://www.nps.gov) or the [NPS app](#) to help plan and prepare. Online you can find tips to help you [Plan Like a Park Ranger](#) and [Recreate Responsibly](#). It is important to know before you go what is open and available, especially if you are interested in staying overnight. There are maps, updated conditions and suggested activities to help you decide where to go and what to do.

The entrance fee waiver for the fee-free days applies only to National Park Service entrance fees and does not cover amenity or user fees for activities such as camping, boat launches, transportation or special tours. Most national parks do not have entrance fees at all. Out of more than 400 national parks, approximately 110 have admission fees that range from \$5 to \$35. All of the money provided by entrance fees remain in the National Park Service and 80-100% stays in the park where

collected. The funds are used to directly support the visitor experience by providing programs and services, habitat restoration and building maintenance and repair.

In 2020, 237 million people visited national parks and spent \$14.5 billion in local communities. This supported 234,000 jobs across the country and had a \$28.6 billion impact on the U.S. economy.

VW to Offer Electric Campervan



continued on page 64

Volkswagen has confirmed the upcoming ID. California campervan based on the [ID. Buzz](#), according to reporting by carscoops.com. The project was "greenlighted" at a Dec. 9 supervisory board meeting and is expected to reach the market in the second half of the decade.

According to the automaker, there is high demand for the California range in many countries, with orders significantly and continually increasing during the past few months. Thus, the board approved the capital expenditure for Volkswagen Commercial Vehicles to start the development of the first fully electric California.

The ID. (intelligent design, identity and visionary technologies) California will expand VW's range of campervans that currently includes the [Caddy California](#) micro camper, the [6.1 California](#) based on the Transporter and the Crafter-based [California XXL](#).

The campervan variant of the ID. Buzz will ride on the MEB platform — probably using the longer wheelbase bodystyle as a base for maximum interior space. Given that it will be designed for longer trips, it will likely get the larger 111-kWh battery pack allowing for adequate range, plus providing power for camping-related appliances. In terms of design, the ID. California is expected to get the signature pop-up roof allowing passengers to stand inside the cabin and creating space for an extra sleeping area. It could also get a kitchenette, and clever storage compartments, benefiting from the flat floor of the electric architecture.

We can only wait to see what the RV industry's upfitters will do with it!

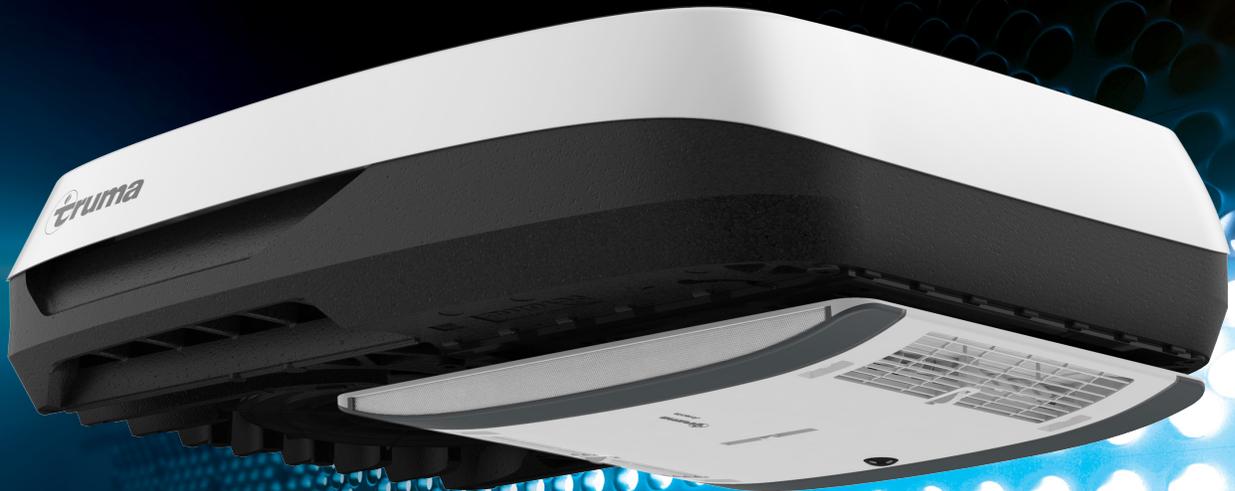
Simply Better

All-new for

2022



Truma Aventa
Perfectly Balanced Comfort



German Engineered for the perfect balance of cooling and humidity, creating ultimate comfort while minimizing noise in a modern, energy-efficient low-profile design.

Innovative

| Intelligent

| Efficient

| Reliable

| Refined

www.truma.net



Fussy Doorlock



We bought used 2010 Forest River Wildwood several years ago and absolutely enjoy it. My biggest complaint so far is that the entry-door locks are very difficult to use — the tumblers on the front and rear doors are difficult to lock and unlock because of the quality of the lock itself. The baggage door locks are not much better. In fact, there were a couple of times when I thought I was going to need a pry bar to get into the main baggage door. Who makes a good lock and where can I pick up the two locks and the baggage door locks?

— **Jeff Heale**

Jeff, I feel your pain. There's nothing worse than being out on a camping trip and getting the feeling that you're going to get locked out. There are several decent RV entry-door locks out there that will match yours. Bauer (bauerproducts.com) makes a high-quality replacement lock for your trailer, as does Creative Products Group (rvlocksandmore.com).

If you would like a lock with a keypad, the aforementioned companies, as well as RV Lock (rvlock.com), make excellent replacements. The keypad is rather handy if you want to go for a hike down the beach, for example, and not worry about losing your keys in the sand. If you need replacement baggage door locks, go to Industrial Lock & Hardware Inc. (shoprvlocks.com). It offers a lot of quality baggage door locks and they have a wonderful chart that allows you to measure and order the correct parts. Slam latch compartment door locks

are also available through Creative Products Group. These locksets can be obtained online or at most RV supply stores.

By the way: for a great step-by-step look at what it takes to replace a stock entry-door lockset with a keyless lockset, see "Locked When Loaded" in the October 2021 issue of RV Enthusiast. The article also details the installation of new paddle locks on storage compartments.

Drip, Drip, Drip

My 2006 Winnebago Journey has had a perpetual leak in the front cabinet over the driver's head for a couple of years. Fortunately, I store the motorhome indoors — but when I'm outdoors it does leak and I'm worried about developing wood rot and other damaging situations. I've resealed around the air horns, where the front cap meets the fiberglass roof and every other little spot that I could find, to no avail. I'm starting to get a little bit frustrated and want to avoid expensive and time-consuming repairs.

— **Brian George**

Brian, this is a common problem with a number of Winnebago motorhomes of that vintage. The caulking used to seal the front cap seems to dry out and turn chalky. I'm not sure exactly what the material used was, but you're not alone. You wouldn't think there'd be any flexing up on that front cap, but

there is. You need to reseal the area with a flexible caulking, like Proflex, that can withstand the constant movement caused by less-than-smooth roadways. As always, preparation is the key to success. Make sure the old caulking is removed and the area cleaned thoroughly before laying down new sealant.

Another spot that you might look at is the section of the end cap that curves over the top and part way down the side of the motorhome. Some Winnebago coaches did not have any caulking in that area. During your inspection, take a look also at the area where the fiberglass roof curves over the motorhome and is inserted into a drip rail. The caulking there can appear to be in good shape when in fact it has come loose. One thing you might think about is using EternaBond tape where the front cap meets the fiberglass roof; it's a little more effective than caulking when it's applied properly.

Refrigerator Freezes All the Food

I've just started experiencing problems with my Norcold model 1210 RV refrigerator. No matter where I set the temperature it freezes everything in the refrigerator — including the milk and lettuce. I have looked online for some solutions and my best guess is maybe it's the circuit board. Any suggestions?

— **Dennis Smith**

I field a number of questions from owners of LP-gas/120-volt AC Norcold refrigerators who have been experiencing the same problem. The first step is to check the thermistor. Disconnect the thermistor — located under a white cover inside at the back of the refrigerator compartment — from the plug and connect the wires to a high-quality ohmmeter. Insert the end of the thermistor into ice water (ideally, 32 to 38 degrees). The ohmmeter should read in the vicinity of 30 ohms.

Remove the thermistor from the water and wrap the end with your hand, holding it tightly for a few minutes to warm it to about 80 degrees. The reading on the ohmmeter for this should be somewhere around 8 to 10 ohms. If the thermistor passes these tests, check the wiring harness from the thermistor to the control board. If you have continuity and you believe that the wiring harness is in good condition, the problem may be in the control board. There's no way to test it at this point; however, it is not common for this control board to fail. The Norcold part number for the thermistor is 640149.

Fluctuating Refrigerator Temperature



ment and it is in the correct position. The Internet has so much conflicting information I don't know what to do next.

— **Robert Flore**

I know exactly what you're talking about. This has been a very common problem for many years. Dometic offered a resistor that could be installed on the eyebrow board to help alleviate this problem. Unfortunately, it really didn't work as the company claimed.

Here's a better option: Dinosaur Electronics (dinosaur-electronics.com) offers a thermistor adjuster for fixed-temperature refrigerators. It's designed to go in series with the thermistor and allows you to adjust the temperature up and down.

Just make sure you actually have a fixed-temperature refrigerator since this product will not work with the Dometic refrigerators that have an adjustable thermostat.

*If you install this device and still have a problem then you will want to test your thermistor (see "Refrigerator Freezes All the Food" above). **RVE***

My Dometic refrigerator has a fixed temperature level and there is no way to raise or lower the setting. Regardless of the outside temperature, warm or cold, everything inside is freezing. I searched online and I checked the location of the temperature sensor on the fins inside the refrigerator compart-

Bill Gehr



Bill started his 50-year career in the RV industry when he went to work for an Airstream dealership. After the gas shortages in the 1970s, Bill decided to start his own business and opened up Bill's RV Service in Ventura, California. After several years in business, he met Bob Livingston, and together they worked on hundreds of technical editorial projects at his shop while becoming great friends. Bill eventually joined Bob on the TV show "RVtoday," filming a number of hands-on projects. After retiring, Bill headed out full-time in his fifth wheel and toured 39 states while writing technical articles for *Trailer Life* and *MotorHome* magazines. He now is Technical Director for *RV Enthusiast*.

vueSMART™

Wireless Trailer Camera

The only trailer camera that installs in minutes!

- ✓ Fits any trailer
- ✓ No re-wiring needed
- ✓ WiFi to any smart device

Put a Set Of Eyes Behind Your Trailer Today!



← **SCAN HERE TO SEE IT IN ACTION!**

or visit www.hopkinstowingsolutions.com/vuesmart for video and additional product information



Part # 50050



Let There Be Shade — Again



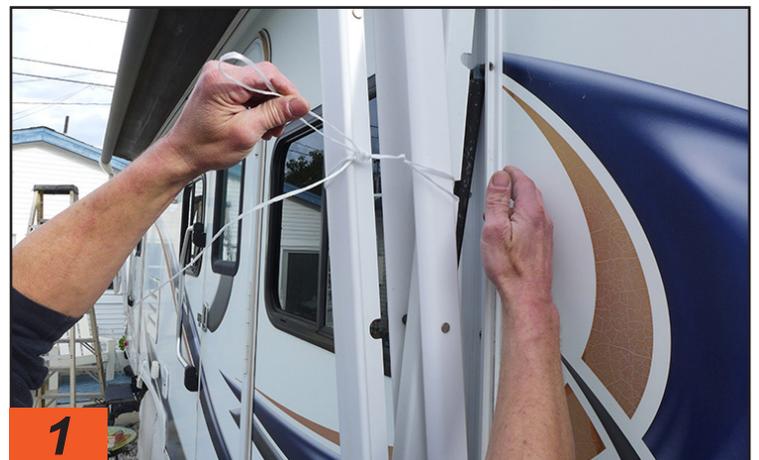
When the patio awning has seen better days, replacing fabric with product from Tough Top takes a few hours to accomplish and makes financial sense

By Bill Gehr / Photos by the author

If you own an RV it probably came equipped with a patio awning, an addition that undoubtedly makes lounging outside much more pleasant. Patio awnings provide shade — and protection from the rain — when going in and out of your RV. Unfortunately, time, the sun and the wind (without a system to retract automatically) will eventually combine to destroy the majority of awning fabrics, especially the section that's exposed constantly to the sun when retracted.

Some might argue that acrylic fabric will last longer than vinyl, but the fact remains that at some point all awning

fabric replacement may be necessary, especially when the RV is used frequently or full time. Complete awnings can be an expensive proposition, but if the hardware is still in good shape you can replace the fabric at a much-reduced cost — and end up with an awning



1 The awning is extended about 12 inches and the arms are tied together with rope or wire so they cannot move outward. The arms must be tied before removing the fabric roller tube assembly (FRTA), otherwise they will extend uncontrollably, which can cause injury and/or damage.



2

Cut the fabric along the awning rail from one end to the other so that the FRTA can be removed from the hardware easily. This is done to facilitate sliding the fabric out of the rail more quickly.

that looks good as new. In some cases the roller tube assembly will also have to be replaced, but adding that cost is still lower than the amount of cash needed to replace the entire awning.

What's more, awning replacement comes with an added bonus: You can choose a different color and/or a heavier-duty fabric replacement. That's exactly what we did to bring new life to a Carefree Traveler, 12-volt DC awning that was in sorry shape after eight years of service. Continued exposure to the elements resulted in a brittle fabric that was torn in several places. Fortunately, the hardware of the 20-foot awning was in good condition. The original fabric was vinyl, which had proven to be fairly durable, but we decided to check out Tough Top Awning's replacement fabric after our initial experience with replacing slide-out topper fabric with the same material.

On this particular type awning, the hardware has a powerful gas strut on either end of the hardware to assist the motor when extending and retracting. This can present a serious problem if

joints in the hardware can be dangerous and should be done with caution, following the proscribed procedures precisely.

“Tough” is an Appropriate Name

The people who founded Tough Top Awnings 12 years ago are no strangers to RVing. They banked heavily on their experiences while hanging out in areas where the wind was constant and, at times, very strong. Numerous failures with the factory awning fabric prompted these frustrated owners to develop stronger material. Not only is the result a fabric that can withstand big winds for sustained periods of time, but the company concentrated on the stitching se-

the fabric should tear and come apart, causing an uncontrolled extension of the hardware and possible damage to the RV. Luckily, there were no springs or torsion assemblies to deal with on this model awning, so the process was a little easier. Nonetheless, the process of changing the fabric when you're dealing with multiple

curing the polychord — which holds the fabric in the roller tube and rail mounted to the sidewall — attached to the front and back of the fabric. Here, marine grade thread—the same stuff used on boat sails — offers superior strength. When you consider the brute force sails must endure, the wind affecting patio awnings pales by comparison. This is a key point, because the stitching here is vulnerable and, frankly, a weak point on many awning fabrics, especially when the fabric is pushed by strong winds over time. The company is so confident in the quality of its fabric that it warrants it for five years, no questions asked.

Tough Top's fabric is industrial grade, therefore it's on the stiff side, which makes it a little more difficult to work with. The vinyl is pre-stretched and the valance is sewn for a one-piece design; the fabric is also UV- and mildew-resistant.



3

Here the remainder of the fabric and polychord is removed from the awning rail. Use a pair of Vice Grips if the fabric is stuck.

Ordering the fabric online, or over the phone, will require some exercise to get the measurements correct. While company personnel are incredibly



4a

A wide screwdriver is used to spread the awning rail and prevent the fabric from snagging. A wet towel will help remove dirt and debris from the awning rail. This will make it easier to install the new fabric.



4b



5a

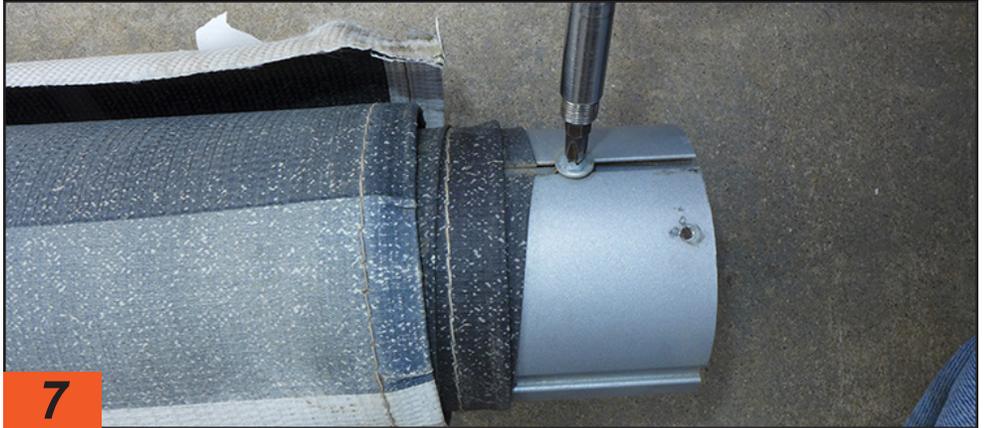


6

Mark the location of the cap in relation to the roller tube for final assembly.



5b



7

Remove the set screws on both ends that prevent the fabric from moving in the roller tube.

The two screws must be removed from the end cap to separate the head from the FRTA. You'll need to support the roller tube as the second screw is removed and the head assembly is separated. Care must be taken when separating the roller tube from the head assembly; you don't want to be surprised by the heavy weight. The FRTA is bulky so care must be taken when stepping down the ladder.



8

Mark the slot where the new fabric will be inserted.

helpful, you are still the one responsible for providing the right measurements. Once measurements are established, the fabric will be sent in a few weeks. For this project, an 89- by 206-inch vinyl fabric was ordered in blue at a cost of \$336; shipping was free. The fabric is available in white, sand, gray, black, green and blue.

Working with thicker vinyl added some time to the two-hour installation, but two people managed to get it done without too much consternation. In the end, the awning looked new again and rolled in and out without complaint, leaving a tightly rolled fabric tucked up nicely against the sidewall. And, of course, while the new fabric is more resistant to winds, proper protocol should still be followed by retracting the awning when away from the RV and when the weather is just too nasty.



9a



9b

A sharp blade is used to make a cut between the main fabric and valance to make it easier to remove without getting stuck on the roller tube.



10a



10b

Remove the roller tube while the old fabric is on the ground. If the old fabric is clean enough, it can be used as a tarp to protect the fabric during the installation process. In this case, the old fabric was too dirty, so a tarp was laid on the ground to keep the new material clean.



11



12

The new fabric is unrolled and oriented for installation of the roller tube.

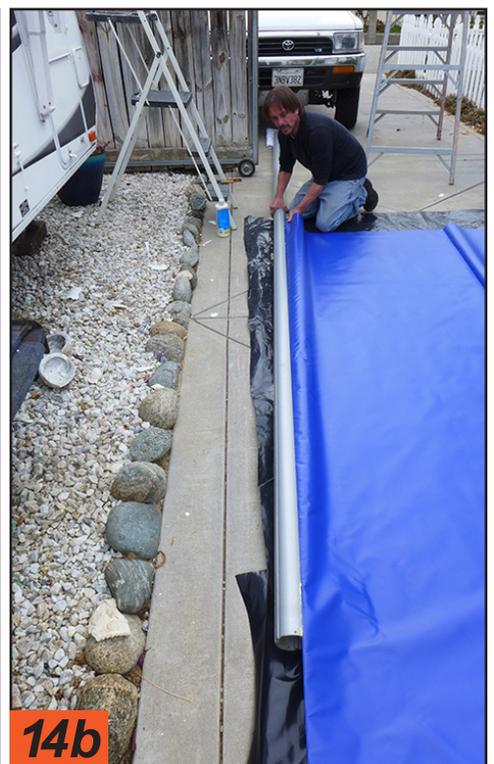
The sharp edges in the roller tube slot are smoothed out with a file to prevent damage to the new fabric during the installation process.



13



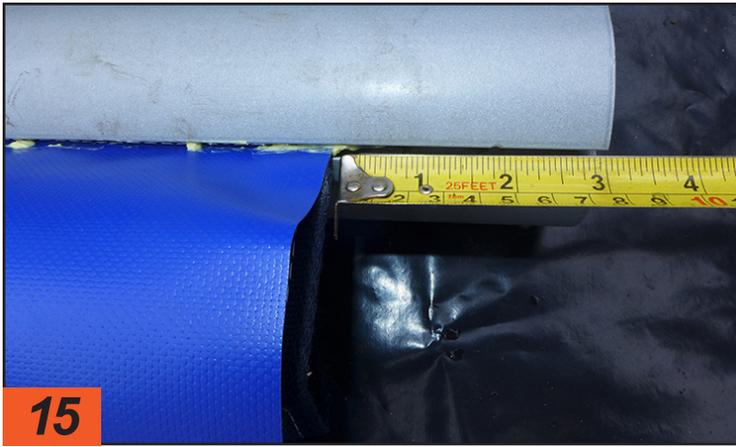
14a



14b

Electrician's conduit lube is applied in the roller tube slot to aid in pulling the fabric through the tight channel. This was particularly important because the new material was thicker. Silicone spray can also be applied, but the conduit lube is water-soluble and will not collect dirt and dust.

The roller tube is installed on to the new fabric, which will take two people to accomplish. By maneuvering the roller tube (which seems counter-intuitive), the fabric remains clean.



15
The fabric is centered in the roller tube by measuring each end to establish equal distance.



16a
16b
Here the fabric is being rolled on to the roller tube. It's important to roll the fabric in the right direction. Since the old fabric is on the ground the direction can be matched by comparing with the new material.



17
The correct direction of the fabric is confirmed here because the material is wrapped over the roller tube, which is the proper orientation.

inTech *RV* Platinum Dealer **Enjoy life camping**

Luna **Flyer** *Terra* *Sol*

Tim's RV, Inc. 15 East Main Street • 413.522.3410 • Erving, MA • TimsRVinc.com



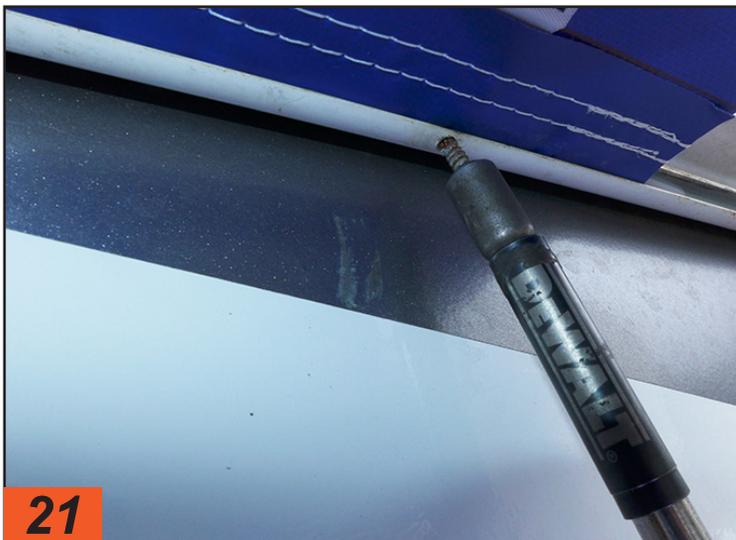
18

Spread and file the sharp edges of the awning rail before inserting fabric to prevent damaging the material.



20

The FRTA is centered roughly into position before installing the end caps. Be sure to replace any rusted screws.



21

After the FRTA is centered, reinstall the set screws on each end, which will prevent the fabric from moving in the awning rail.



19a



19b

An adjacent fence in the yard where the trailer was parked reduced clearance, making it necessary to use an extra ladder for support while raising the fabric and roller tube high enough to install in the awning rail without dragging.



22

Run the awning in and out a few times to make sure the fabric will not wrinkle. If it does, the fabric will need to be re-centered. Now it's time to enjoy a cold one under the awning. **RVE**

Source:

Tough Top Awnings / 360-953-3299
toughtopawnings.com

Drawing to a Close



When routing the wires, make sure the bend is identical to the existing cable so that it will flex properly as the awning opens and retracts.

Carefree of Colorado's Direct Response upgrade kit for Traveler or Eclipse awnings will automatically retract an awning before the winds have their way with the fabric

By Bill Gehr / Photos by the author

An extended patio awning is a wonderful thing to have when you're camping; one that's ravaged by the wind is not. Strong, unpredictable winds can literally destroy your patio awning in a matter of seconds. Extreme weather is probably the Number One reason patio awnings are ruined, which likely also results in collateral damage to the RV, not to mention impacting your entire vacation. If you happen to be in the RV at the time of a wind event you can quickly retract the awning, but if you forget to retract it before leaving the site for a while, you have two choices: hope for the best in the event of an unexpected storm — or

rely on an automatic closure system that retracts the awning at the first sign of trouble. We prefer the latter.

Carefree of Colorado, a leading manufacturer of RV awnings, offers a solution to this dilemma with its Direct Response electronic motion sensor upgrade, which will automatically retract the awning in strong winds. The device mounts in the vicinity of the motor/head assembly and has a preset sensitivity, which can be turned on or off when washing the awning fabric. The first hint of strong winds or a sudden gust will signal the system to retract the fabric. Many awnings are fitted with such a device, but it is typically reserved for more expensive RVs; most older rigs aren't

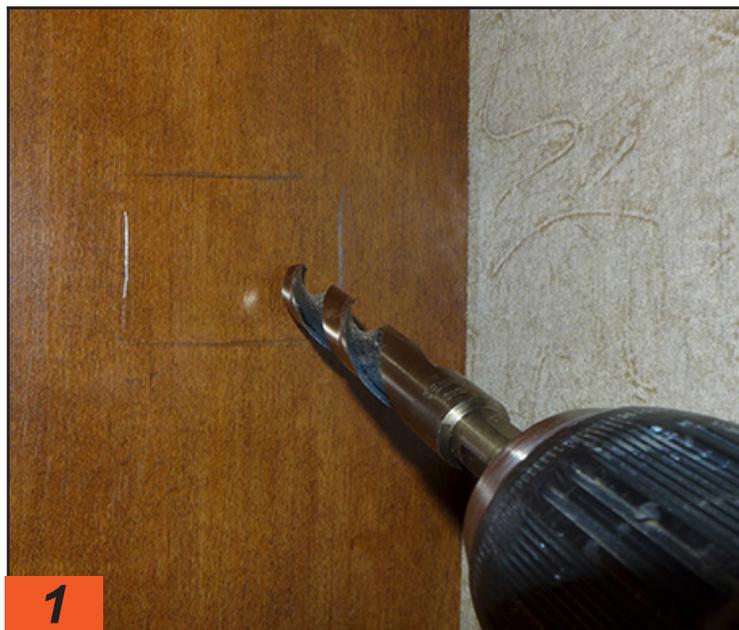
equipped with an automatic retraction system. The kit for the Carefree Traveler, part number SR0093, retails around \$98, while the kit for the Eclipse model (SR0036) is \$350. Most handy owners are capable of installing either kit.

Installation

Access to the front motor/head assembly will be necessary to complete the installation, which should take just a couple of hours. You'll have to route new wiring to the awning sensor — but before you get to that step, you'll need to disconnect the power from the original switch after fully extending the awning. The original "extend and retract" switch will not be functional after the



The kit comes complete with everything needed to install the Direct Response, except for the wire needed to connect power to the on/off switch. Wiring for power will require 14-gauge primary wire, which is available in hardware and auto parts stores and online. Black and red wire was used for this project.



1

After finding a suitable location for the switch assembly, mark the cutout with a pencil and drill pilot holes in each corner.



2

A cordless oscillating tool was used to make the cutout (a small jab saw will also work). Just be careful not to scar the adjoining woodwork.

Direct Response is installed. It will be necessary to find a suitable location (in a closet or cupboard or on a wall) to mount the new switch assembly where a suitable 12-volt DC power supply is nearby — either from the original switch (like it was done for this project), a reading light or any other 12-volt DC source in the area. The wire for this step is not provided with the kit, so plan on procuring about 20 feet of 14-gauge stranded wire in red and black to have on hand. This circuit also needs to be protected by a 15-amp fuse.

Once you establish a mounting location for the new switch assembly, you'll need to follow the directions to complete the process, which are very explicit and supported by a wiring schematic. The sensor

module will be mounted near the motor assembly, which is located under the front head cover (on the right side while looking at the awning).

Everything for this installation went pretty smoothly, although it was a little tricky pressing the wiring harness into the hardware assembly slot specifically allocated for this purpose. It was also difficult to understand exactly where the company wanted the sensor module to go; we put it into the slot that made the most sense and secured it with cable ties rather than the double-sided tape that was supposed to be in the kit (but wasn't). That diversion turned out to be best, since double-sided tape has a tendency to loosen with age and exposure to heat and you don't want the sensor unit flopping around inside the plastic cover that surrounds the motor assembly.

A second stumbling block was experienced when trying to remove the plastic cover. In this case, a couple of the screws were rusted and needed to be drilled out to free the cover. All rusted screws should be replaced — in any project. Also, there are a few safety standards that must be considered and are clearly outlined in the instructions.

Once the installation was finished, the mechanism was tested a number of times by simulating a wind event by bouncing the end of the awning with the bristle end of a broom. The system worked perfectly every time, offering a strong sense of security and comfort knowing that the awning and/or the RV won't be damaged and it won't be necessary to initiate an insurance claim. Obviously, the switch must be in the "ON" position at all times to put the system on standby.

Of course, while Direct Response keeps the awning safe from weather

events, most experienced owners will still retract the awning when they are away from the RV. There's no sense in allowing the awning to flop around in the wind before it hits the threshold that automatically retracts the fabric. When you forget, however, it's nice to know you're still protected.



3

The wiring harness in the kit is installed in a specific channel in the awning hardware. The cable must be pushed firmly into the channel so it will stay in position without getting pinched while the arm is in motion.



4a



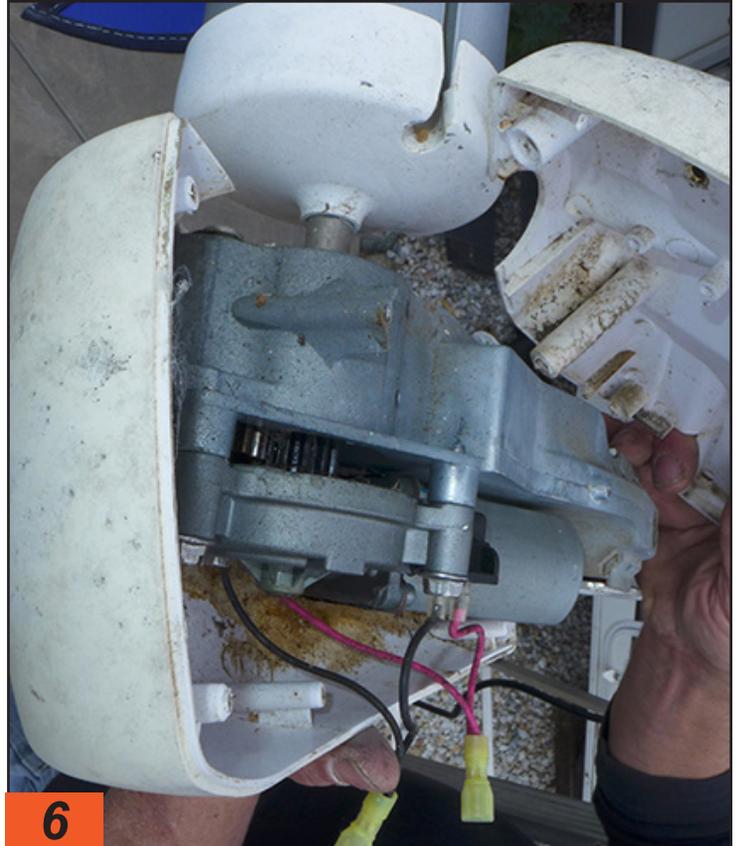
4b

A 7/16-inch hole is drilled through the hardware just below the existing cable into the cupboard where the switch assembly is mounted. It's a little tricky to get the wires through the 7/16-inch hole. To accomplish this, it's best to feed one wire at a time through the hole.



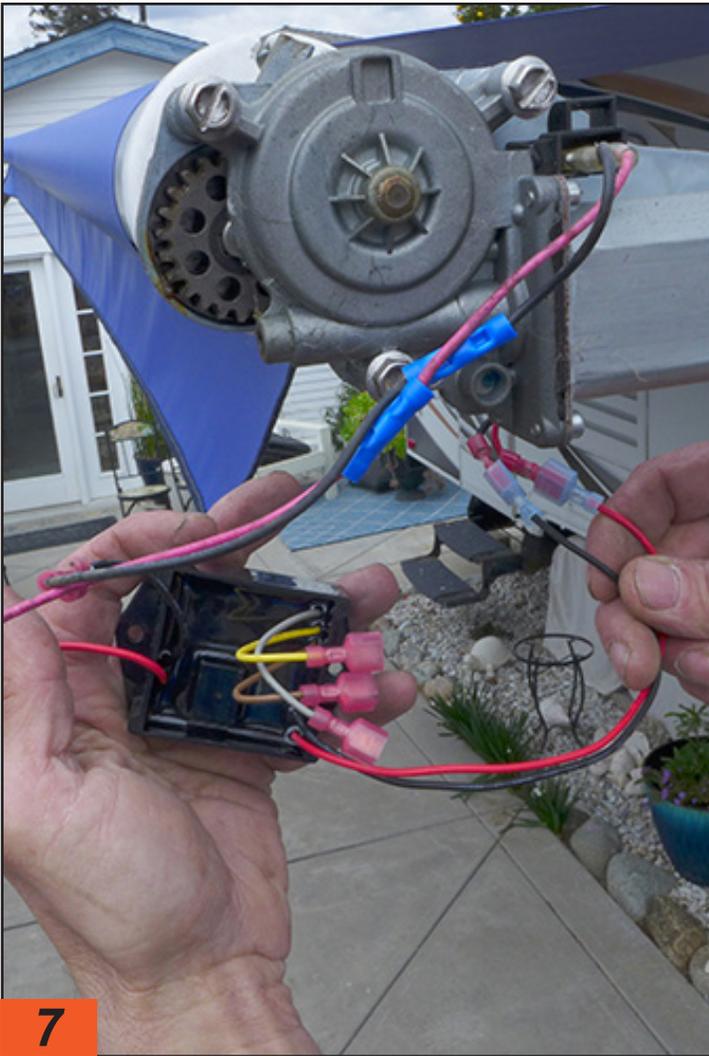
5

Remove the end cap from the hardware to expose the motor and gear box assembly. Access is on the front of the awning. Two of the screws were rusted and required drilling to remove. Always replace any rusted screws.



6

The inner cap will have to be removed to pull the red and black wires off the emergency terminals. These terminals will not be used with the Direct Response unit; doing so will fry the motion sensor module.



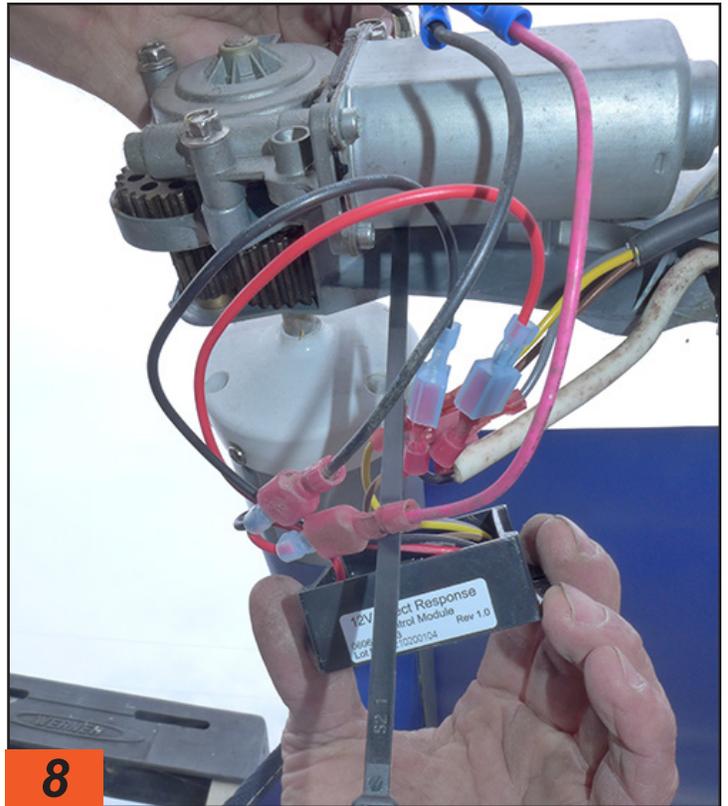
7

The motor leads were installed following the diagram in the installation instructions. The connectors were cut from the red and black wires that originally were removed from the emergency terminals and butt-connected to the motor leads for a more permanent installation.



9

With the cover removed for installation of the module, take time to inspect the gears. This is also a great time to lubricate the gears with white lithium grease. Once everything checks out and the module is in place, put the covers back on.



8

The instructions show where the module must be placed, but they are not very clear, so we found ourselves also relying on common sense. There was supposed to be double-sided tape on the module for mounting, but it was not included. However, we realized that cable ties will work better, so we added them.



10

After the module was installed, the final 3-4 feet of cable were routed in the awning arm channel provided for this purpose.



11

Following the instructions, the wiring to the appropriate terminals was installed in the back of the switch assembly.



12

The wiring from the original extend/retract switch was disconnected to prevent accidental activation. Although the switch will be put back in the original location, it's only there to keep from patching a hole in the wood; wires are not re-connected.



13

Once the installation is completed, extend and retract the awning three or four times to make sure everything is working correctly and no wires are pinched. With the awning extended, use the bristle end of a broom to agitate the awning near the sensor to confirm that the module is working and the awning is closing. When the awning is extended, be sure to leave the switch in the ON position, otherwise it won't retract automatically. **RVE**

Source:

Carefree of Colorado / 303-469-3324
carefreeofcolorado.com

HELPING TO KEEP YOUR TIME ENJOYABLE WHILE OUT ON THE ROAD.



parts.revgroup.com/store





Design Cents

DIY RV renovations are kind of a big deal. Here are a few RVs which families have transformed on a budget — and inspire others to do the same

By Chris Hemer / Photos courtesy Janelle and Chad Payne, Kelsey and Sebastian Paz

As RVers, we're accustomed to following rules. Check your tire pressure. Don't overload. Take short showers. Quiet hours are from 10 PM to 7 AM. We slowly get used to the idea that living in an RV is much different from our homes — not only is it a comparatively small space to live in, but "the freedom of the open road" has its limitations.

Along with that, trying to personalize your RV can be difficult. The floorplan can't easily be re-arranged and furniture choices are, for the most part, limited to...well, RV furniture. Most of us make the space our own with a few pictures, some throw pillows and cutesy signs that say things like, "Home Sweet Home," or "A bad day fishing is better than a good day working."

But what if you don't know the rules? What if you're bliss-

fully unaware that an RV can't be treated just like a smaller version of your home? What if you just throw caution to the wind and do what *you* like, not what you've been told is acceptable in RV-land?

Scrolling through Instagram, we discovered two families that literally and figuratively live outside the box. They view RVs as an inspiration, not a limitation. And the renovations they've completed on their pre-owned RVs is nothing short of amazing — in fact, you might just look at some of their photos and say, "That's *not* an RV." Best of all, they've done the work with limited budgets, affecting most of their changes with readily available products and a lot of good 'ole-fashioned elbow grease. Take a look at what they've done — you might just be inspired to begin renovating your own RV this winter.

The Ideal Project

*Janelle and Chad Payne
Instagram: nailgun_nelly
1974 Ideal travel trailer*



Photos by Sefra Escobar

It took five months and about \$7,000 for Janelle and Chad Payne to completely renovate their 1974 Ideal travel trailer.

Inspiration for RV renovation can come from just about anywhere — and in the case of DIY fanatics Janelle and Chad Payne of Nipomo, California, that just happened to be the next-door neighbor.

“She had this old 1974 Ideal travel trailer sitting on her property,” Janelle explained, “and I thought maybe she’d make me a deal. When I approached

her, she said, ‘Thank God, I’ve been praying that someone would just come and take this.’ She just gave it to us. The funny part is, they had originally purchased it from the people that had owned *our* property. Now it’s back.”

Getting the trailer for free allowed Janelle to fearlessly pursue her creative vision. “I don’t have a plan when I go into something,” she told *RV Enthusi-*

ast. “I just knew that I wanted it white and bright. Everything was wood, and that was common, but it had oak — and, I don’t know, it’s not my thing. I wanted it to feel more open. I just wanted everything gone. There were so many closets in it, a huge TV opening, two full-size closets on the right of the bed, plus a cabinet above the master bed. In the bathroom next to the toilet, there was a huge enclosed closet... I think the furnace used to be there. I ripped it all out. My husband would come by and say, ‘Okay, what else is going to be gone?’”

After essentially gutting the trailer, Janelle started looking at the possibilities. “There was an area where the dinette table would fold up, but only one of the bench seats was there. If I were to make it a bed, it would be the size of a dog bed. I wanted a spot for each one of my boys. So that’s when I got rid of the closets next to the master bed,

After nearly 50 years, the Ideal’s exterior was showing its age. Chad cleaned off the crud and painted the exterior with high-gloss exterior household paint, and Janelle finished off the exterior with wood trim around the windows. The front window cover, meanwhile, was covered in lattice boards, then glued and screwed in place.





The original kitchen was furnished with oak cabinetry and brown carpeting that made the space feel dark and heavy. The old Magic Chef oven and associated cabinetry was discarded and replaced with open shelving, the cabinets painted white and butcher block counters installed. The original stove top was retained, but the carpet was replaced with luxury vinyl plank flooring.

ripped all that out down to the floor and built bunk beds.”

Tearing everything out of the trailer did have its consequences — most notably, holes in the walls and ceiling left by the cabinet mounting hardware. “With DIY in general, if I look at what my plan is, something always screws it up and I have to think about how to fix it. You find a clever way to fix your mistakes.” In the case of the Ideal, the solution came in the form of 4 x 8-foot sheets of melamine, which Janelle cut into 6-inch strips that she glued and stapled to the walls to mimic shiplap. “Then, I made a design for the ceiling out of the same material to cover the holes that I had made. I could have filled them, but I would have noticed them, and that would have bugged me.”

Along the way, Janelle and Chad discovered other obstacles that had to be overcome — like a missing black tank. “They had basically bypassed it, so it always had to be hooked up (to a sewer line). My husband’s stepdad is a jack-of-all-trades, and he was able to install a new one for us.” The talented Mr. Fixit also installed a new Penguin roof air-conditioner with heat pump, reinforcing the upgrade with a metal beam for added support.

Though the couple has extensive

remodeling experience, they learned a number of other things that are different about renovating an RV. “The walls are paper-thin, so you can’t just pop any old screw in; even finding studs is different. Then there’s the weight consideration — even if you think ‘This is an amazing couch’ you can’t just buy it and put it in. You have to make sure it will fit and that it won’t be too heavy. In a house, you don’t have to do that.”

In the end, Janelle stuck with the

❧

‘With DIY in general, if I look at what my plan is, something always screws it up and I have to think about how to fix it. You find a clever way to fix your mistakes.’ — Janelle Payne

❧

original stove, but replaced the cabinets with open shelving, which many of her Instagram followers questioned.

“People were like, ‘Why would you do

that?’ Because it’s cute, and I like cute things.” But there’s also some method to this madness: It takes Janelle just seconds to remove everything from the shelves before travel and put them away, and she uses hook-and-loop-fasteners on little plants and other knick-knacks to keep them secure.

The trailer’s exterior was finished in high-gloss exterior household paint, which husband Chad applied with a common Grayco sprayer after a few coats of Enduro epoxy primer. “We didn’t want to use automotive paint because we’re cheap,” Janelle laughed. “Who knows if it will last, but it’s been good so far.”

In all, the project took five months and the couple spent \$7,000 for the entire project, including new tires.

Janelle offers this advice to those considering an RV renovation of their own: “I think that people look at what we did and think they can’t do it,” she said. “Just take off those window coverings — it makes such a difference. Paint is amazing. And furniture. I feel like so many RVs are dark...all the furniture is dark and it’s like you’re walking into a cave. Paint it, swap those couches for a nice futon or something. You don’t have to gut it. Start small and get bigger. It’s totally doable.”

Toy Hauler Haven

*Janelle and Chad Payne
Instagram: nailgun_nelly
2006 Jayco Octane toy hauler*



Dirty motorcycles and beer-drinking bros? Not in this toy hauler. Green cabinets, a black ceiling, luxury vinyl plank flooring, residential furnishings and carpet runner give the interior a whole new look.

Rvers may have a multitude of reasons for buying a toy hauler — and they don't always include toys. "I wanted to be able to open up that big back door and sleep by the ocean," said Janelle. "We found a 2006

Jayco Octane travel trailer toy hauler with no water damage for \$10,000. That's expensive for us, but it was worth it."

For this project, Janelle decided on a dark, masculine 'loungy look.'

"The toy hauler wasn't my style at all, and creating a darker, moody vibe... it's very hard to find and to shop for." As with the Ideal travel trailer, Janelle started by painting everything, then added decorative features you're unlikely to find on any

other toy hauler, like wood beams on the ceiling and (drum roll please) *chandeliers*. She also turned the kitchen into a plate holder, restyled the wheel wells and painted the tub. But by far the biggest



It may not be for everybody, but the Paynes chose to paint the exterior of their Octane travel trailer black. The main reason Janelle and Chad wanted a toy hauler was so they could open up the back door and sleep by the ocean. Mission accomplished.

achievement, in her estimation, are the unique countertops in the kitchen and bath area. "I found a product called Stonecoat countertops (stonecoatcountertops.com/home)," she said. "They

are so awesome for DIY; they lay it all out for you and you can't mess it up. It's a super lightweight epoxy resin and you just pour it on — it's crazy how easy it is. You can swirl it, do straight patterns,

whatever you want."

Before applying the coating, however, Janelle took the stone countertop idea a step further and devised a plan to make them look like they were actually crafted from a single slab. "I bought some Bondo (automotive body filler) and slapped it on the edges," she explained. "I let it dry, then came back and sanded it so it wasn't sharp. Then I poured on the Stonecoat epoxy so it spilled over the edges." Instant "stone" countertops without the added weight or expense.

The exterior got the same treatment as the Ideal, but for this project, the couple chose straight black. "The jury is still out on that," she laughed, "but so far, we like it. And it doesn't get that hot here — I would never even think about it if we lived in Arizona."

With the toy hauler project completed, Janelle already has her sights set on bigger — and smaller — things. Because her and Chad own property and have RV hookups, the dream is to one day build a refuge of sorts for traveling nurses: a cozy, comfortable place to stay while in the area. "I already transformed a tack room on the property into a little studio — but once I got the Ideal, I sort of went down a rabbit hole. I thought it would be fun to have a bunch of trailers, all themed: dark and masculine, beach-themed, girly-themed, etc." For now, however, the couple is working on a Ford Transit van, which, like the other two projects, is sure to inspire.



Janelle made the toy hauler's ramp door a comfy patio by installing D-rings and cables herself.



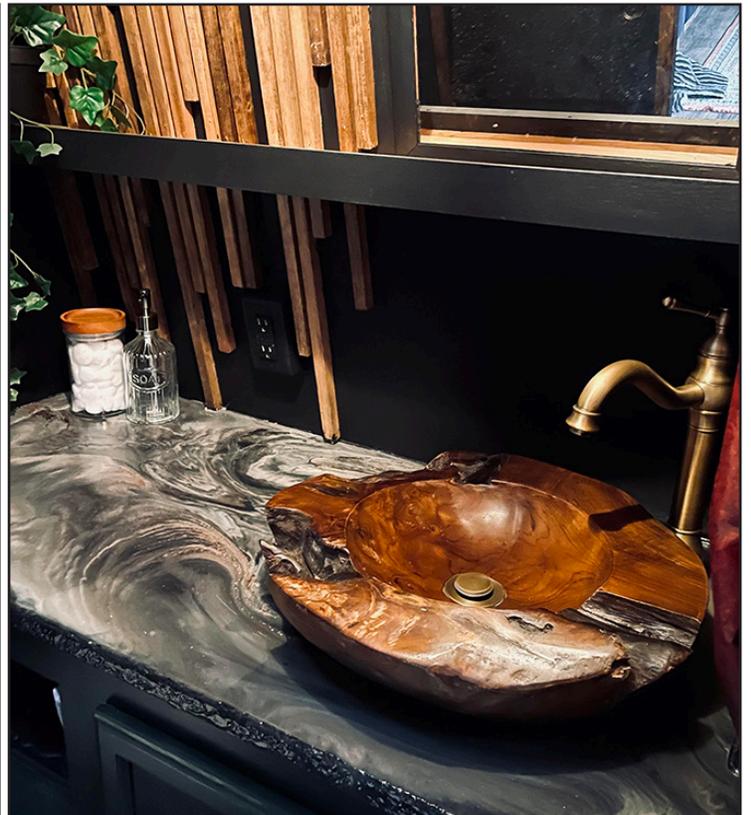
These before-and-after photos of the toy hauler's kitchen show what is possible with a little imagination and a lot of talent. The original TV enclosure was turned into a plate holder — and there's even a wood beam on the ceiling!



Everyone knows what a fiberglass RV shower looks like. Janelle spiced hers up with black ceiling tiles glued to a waterproof membrane.



Sometimes, there can be happy mistakes. Janelle purchased what she thought was a human-size electric fireplace — but once it was delivered, she discovered it was about the size of a small ice chest. Rather than return it, she drew inspiration from it and made this cool cabinet complete with little logs.



You're not likely to find an RV bathroom countertop like this anywhere, let alone in a toy hauler. Janelle used a Stonecoat Countertops kit to get the unique finish, then topped it off with a solid teak sink she purchased on Amazon "for about \$50."

Family Time

Kelsey and Sebastian Paz
Instagram: our.rv.adventures
2017 Jayco Eagle fifth wheel

For Kelsey and Sebastian Paz, the decision to remodel their 2017 Jayco Eagle fifth wheel was an easy one. Having served in the Air Force for several years, Sebastian was finally returning home — and the couple saw full-time RVing as a perfect opportunity to spend more time with their two children and see the country. “We sold our home and most of our belongings in the summer of 2020,” Kelsey recalled. “I thought, now that this RV is our home, I’m going to make it feel like one.”

Kelsey and Sebastian are both travel nurses, who fill in at short-staffed hospitals when needed — so while patching up people is something they’re both familiar with, fixing up an RV was alien to them. “We had never even been camping in a trailer, let alone lived in one,” said Kelsey. “YouTube was my best friend...I watched a lot of videos, and started following remodeling accounts on Instagram. I drew pictures of what I wanted to do and my husband made it happen.”

Eventually, that is. Shortly after purchasing the RV used, the couple discovered water damage, which necessitated the replacement of the floor in one of the slideouts before their remodeling job could commence. “We should have had the unit inspected first before we purchased it — that was a rookie mistake,” said Kelsey. But once that work was professionally completed, the couple again set their sights on making the trailer a comfortable family home. “I had a vision of what I wanted it to look like,” she said. “Paint on the walls, changing the furniture, etc., but also making the trailer more functional as a whole.”

In Kelsey’s estimation, painting wasn’t any more difficult than the interior of a home — the walls were roughed up with sandpaper, thoroughly cleaned, then painted with a product called Beyond Paint ([beyondpaint.com/](https://www.beyondpaint.com/)). “It says that it requires no stripping, no sanding and no priming, but we prepped the surface anyway,” she said. “So far it’s holding up really well.”

For the living area, Kelsey was inspired by the “boho chic” design style made popular by Chip and Joanna Gaines of *Fixer Upper* fame. If you’re familiar with the show, you know that shiplap (a specific type of wood paneling) is one of Joanna Gaines’ favorite design elements — but adding it to their



RV made Kelsey uneasy. “I didn’t want to add any more weight than was necessary,” she said. “Plus, putting holes in those thin walls to put shiplap up made me nervous. I wanted something that, if I hated it, could easily come back down again.”

To that end, the couple settled on shiplap wallpaper — and it looks like the real thing. “Some people say not to use wallpaper in an RV because of temperature changes, but we live in ours full time, so temperature differentials are minimal. Otherwise, using wallpaper might be a problem (for seasonal RV owners).”

From the outset, Kelsey knew that the living area was going to require

more than just a change of décor. “It was really inconvenient and uncomfortable” she recalled. “When we were seated on the couch, we were perpendicular to the TV. We wanted a movie-watching couch. We wanted something we could entertain with.” To that end, the original couch at the rear of the living area was taken apart and discarded, replaced with a small table and two chairs that make a convenient workspace for parents or kids. The two recliners opposite the entertainment center — as well as the dinette and benches — were also removed to make room for a new, larger residential couch.

“I was concerned about the weight,

Kelsey's tips:

- Take careful measurements before purchasing any furniture.
- Make arrangements to live somewhere else while you're remodeling.
- Make your design fit your life — and do it one piece at a time.

but I also knew that it had two big recliners where the new couch was going. The couch we purchased weighed about 200 pounds. I figured the two recliners weighed about the same." The couch in question was purchased online at Wayfair ([wayfair.com/](https://www.wayfair.com/)) which was a smart move for a couple of reasons: One, picking up an assembled couch from a furniture store in a truck equipped with a fifth wheel hitch and other equipment in the bed would be far from convenient. More importantly, an assembled couch would not fit through the fifth wheel's door. The couch the Paz family ordered was shipped to them disassembled, and then assembled inside the RV. The RV-specific

window coverings were removed as well and replaced with cozy curtains, and decorative pieces, like throw rugs and a comfortable hassock, were gradually added.

This particular floorplan has a kid's area midships, but it was only equipped with one bunk, underneath which were "gamer's chairs." To make the area more usable for their children, Kelsey and Sebastian set to work building a second bunk underneath. "We looked at how the top (original) bunk was mounted," Kelsey explained. "It's inside the slideout room and has a lip attached to the studs on three sides. So, we basically mimicked that." The couple attached another lip in similar fashion below the top bunk, then built a



Sebastian and Kelsey Paz

bed frame and topped it with plywood and a mattress from IKEA. The railing is made from ½-inch steel piping, which was ordered on Amazon. "It came in individual pieces," she said. "I pieced it together the way I wanted it, then built a ladder out of the same material."

As ambitious as all this sounds, Kelsey said the biggest job was the



The centerpiece of the living area is a white residential couch purchased on [wayfair.com](https://www.wayfair.com/), complemented by white walls with sage green trim, residential window coverings and decorative elements like throw pillows and a hassock. "RVs always seem to be dark, inside" said Kelsey. "Dark walls, dark furniture. Paint goes a long, long way." A hutch at the end of the couch provides additional storage space, has a dog kennel at the bottom and also serves as a small desk thanks to a pair of stools.



The original couch at the rear of the living space was removed and replaced by a desk with two chairs, and shiplap wallpaper.



In the kitchen, the pantry door was painted white, the lower cabinets sage green and the backsplash covered in Tic Tac peel-and-stick subway tile. The refrigerator was covered in chalkboard wallpaper Kelsey found on Amazon.



Much of the original lighting was replaced with residential sconces, like this one. "A lot of people don't know that it doesn't matter what light fixture you use in an RV, as long as you use a 12-volt bulb," said Kelsey.



The bath area was transformed with peel-and-stick Tic Tac subway tile, vintage-style lighting, round mirror, and black lower trim with board and batten. The butcher block countertop and vessel sink yield more counterspace.

bathroom. "I really wanted more counterspace," she said. "So, we took out the sink and put in butcher-block countertop and a residential vessel sink. Because the sink sits on top of the counter, it gives us extra space." For decoration, the couple stapled 2-inch x 1/4-inch planks of poplar to the wall behind the sink and toilet to make it look like board and batten, then painted it black for contrasting appeal. Peel-and-stick Tic Tac subway tile, a round mirror and vintage-looking residential lighting round out the boho design aesthetic.

In the bedroom, the headboard covering was removed and replaced with woodgrain wallpaper and, again, all of the dark surfaces were painted for a lighter, brighter space. In all, the project took approximately four months to complete and cost the family approximately \$2,000 including the furniture and decorations (but not the repairs that were required initially).

"Whatever you do, just make it a fit for your family," Kelsey advises. "Making something beautiful is nice — but making it functional for your lifestyle is the priority."

That Rusty Bus

T.J. and Heather Bedacht
FaceBook: GciDigitalImaging/
2014 Fleetwood Discovery 40G



Underneath all that “rust” is a well-cared-for 2014 Fleetwood Discovery 40G diesel pusher.

It's become something of a tradition to watch Christmas-themed movies during the holidays — and “National Lampoon’s Christmas Vacation” ranks right up there with the best of them. Especially when it comes to the travails of “Cousin Eddie” (Randy Quaid) and his much-rusted 1972 Ford Condor motorhome.

Well, here’s the contemporary version.

Granted, this isn’t an “RV renovation” in the strictest sense. Owners T.J. and Heather Bedacht have pretty much left the interior of the 2014 Fleetwood Discovery original. “It’s actually a beautiful coach underneath the skin, and was



Halfway through the three-day process, the bottom half of the Bedacht’s Fleetwood is already assuming the persona of the 1971 Ford Condor rustbucket from National Lampoon’s Christmas Vacation.

very well taken care of,” said T.J.

But oh, that skin.

T.J. is the owner of CGI Digital Imaging, a Cincinnati, Ohio-based company that specializes in printing services — big printing services. And while the company’s mobile designs — known as wraps, because they are computer-generated graphics applied to the vehicle’s exterior — usually tend to revolve around things like company vehicles and food trucks, it didn’t take much for T.J. to visualize “something different” for the Fleetwood while traveling during the just-passed holiday season.

“We bought our Fleetwood this summer and for this trip we wanted it to look different,” he explained in mid-December. “We talked about a bunch of ideas and came up with the ‘Cousin Eddie’ look because my uncle is a huge fan of the 1989 film ‘National Lampoon’s Christmas Vacation.’ Originally, we planned to keep it a secret but just couldn’t hold back, so my uncle does know it’s going to pull up in front of his house sometime soon.”

So, yes, all that “rust” you see is a vinyl covering. According to an interview with the Bedachts by “The Party of 6” ([youtube.com/watch?v=BK65VtoUY-VA](https://www.youtube.com/watch?v=BK65VtoUY-VA)), it took three days for technicians at the company to wrap the Fleetwood.



Even close up, the graphics make the Fleetwood look for all the world like a misused coach left to the elements for far too long.

So, what would something like this cost to be replicated?

“Depending upon design, you’re looking at \$8,000 to \$15,000,” said T.J. “With the design time I have in this and the detail — there was more than 40 hours of design time in this bus — it would be \$15,000, at least.”

To complete the “look,” the Bedachts also wrapped their Ford Expedition dinghy.

“We wanted something no one else has,” said T.J. “When we pull into a campground, I want it to be the talk of the campground. I don’t want to have the same unit as my buddy.”

Mission accomplished. **RVE**

Top RVs for 2022

By the staffs of *RVBusiness* & *RV Enthusiast* magazines

Among the small army of engineers, designers and product managers within the RV industry who are enlisted with the task of developing new concepts for each model year, there's probably no phrase that has more impact than "What if?"

They hold late-night meetings and challenge one another with possible innovations, concepts and other ideas that might never see the light of day — but nonetheless ask "What if we tried this?"

They attend home and garden shows, picking up on emerging trends in colors, textures and fabrics, and ask "What if this could be adapted to RV use?"

And then they take those ideas, build pre-production prototypes and invite their associates, dealers and consumer groups to tour them — and listen with a critical ear as they again ask "What if we changed this just so?"

Finally, at some point "What if" becomes "Let's do it."

While the past two years have presented their own challenges — most new models for the coming camping seasons are introduced at the trade-only Elkhart RV Open House, a week-long event that annually turns the streets of Elkhart, Indiana, into North America's largest RV display but has been interrupted by the COVID pandemic — the staff of *RVBusiness* nonetheless views hundreds of new RVs slated for production in order to present what it considers to be the best new towable and mo-

torized RVs. For the 2022 model year, editors of *RV Enthusiast* joined them in visiting dozens of RV manufacturers

across northern Indiana. At each stop, we viewed new models and queried executives, product managers and engineers to learn how certain designs and products were developed — and how they were expected to impact the industry.

Everyone involved then collected their notes — and their opinions — for *RVB* Executive Editor Rick Kessler, and

the discussions began. Eventually, a consensus was reached and a list of the Top 25 New Debuts was compiled; from it, five RVs were selected as finalists for "RV of the Year" — and from that lineup, one model was chosen as the year's penultimate RV.

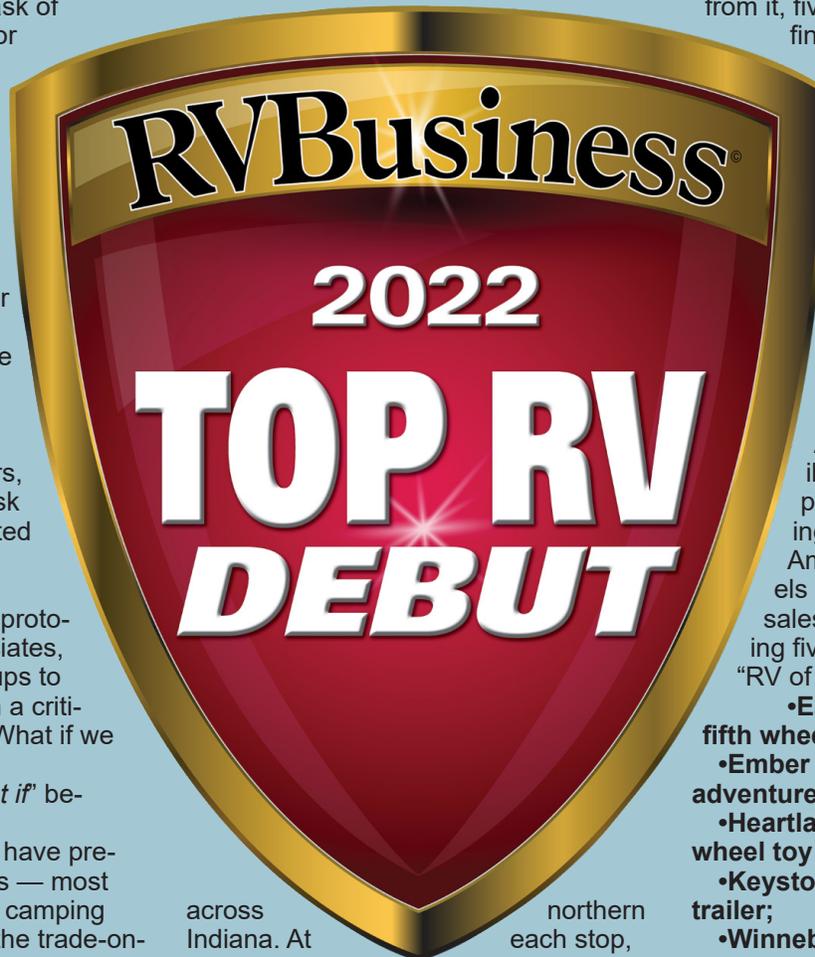
It's not an easy process. While the industry is on a roll as consumers continue to "rediscover" the joy of camping with friends and family, manufacturers aren't simply sitting back and reaping the rewards that accompany record sales. As 2022's lineup of finalists illustrates, OEMs continue to push the design and engineering envelope.

Among the myriad new models soon to debut on dealership sales lots nationwide, the following five were named as finalists for "RV of the Year.:"

- East to West — Ahara 365RL fifth wheel;
- Ember RV — Overland Micro ROK adventure trailer;
- Heartland Cyclone 4014 fifth wheel toy hauler;
- Keystone Arcadia 370RL travel trailer;
- Winnebago EKKO Class B.

As the saying goes, however, only one can win — and in this instance, the Keystone Arcadia earned overall top honors as "RV of the Year."

That said, every RV highlighted within the following pages as a 2022 "Top Debut" deserves accolades — and strong consideration should you be in the market for a new RV this year.



Special thanks to *RVBusiness* Publisher Sherm Goldenberg, Chief Revenue Officer Gregg Fore, Executive Editor Rick Kessler, Editor Gary Gerard and Photography Director Shawn Spence, as well as writers Ron Barger, Jim Mac and Travis Pryor and photographer Peter Ringenberg, for their assistance in creating this special section.

Want to stay abreast of what's happening in the RV space? Interested in new models and products as they are released rather than waiting until they appear at dealerships? As the only RV trade publication located in Elkhart, Indiana — the heart of the RV industry — *RVBusiness* is the premier business-to-business publication in the industry, and *RVEnthusiast* read-

ers can subscribe to the *RVBusiness* daily news feed and learn of advancements being introduced on a day-to-day basis. Go to rvbusiness.com/subscribe/ to sign up for the daily news feed as well as the digital edition of the bi-monthly magazine.

RVBusiness
RVBUSINESS.COM



2022 'RV of the Year' — Keystone Arcadia 370RL Travel Trailer



Keystone RV Co. President Jeff Runels (left) and Product Manager Dustin Tavernier inside the rear lounge layout of the Arcadia.

Back in January 2021 at the Florida RV SuperShow, Keystone RV Company introduced the Arcadia fifth-wheel. The company touted it as an “all-new” ground-up reinvention of what it means to be a towable RV. The Arcadia 370RL travel trailer takes many of those innovations and incorporates them into a camper that Keystone officials consider equally groundbreaking.

We agree with that assessment and, while terms like “game-changer” and “innovative” are frequently overused, we feel the Arcadia line overall — and the Arcadia 370RL travel trailer, in particular — have rightly earned “RV of the Year” recognition.

Why? We were impressed by the engineering and construction — especially the “crawl space chassis,” the refined interior styling, and adoption of leading-edge technology, particularly SolarFlex, Keystone’s OEM-installed solar system.

Keystone executives admit the road

to launching Arcadia was a winding one, primarily due to supply chain difficulties. However, even with these challenges, Arcadia still racks up an impressive list of innovations. We expect many of these eventually will find their way into other Keystone product lines.

Here are some key highlights that

make Arcadia 370RL the *RVBusiness* 2022 “RV of the Year:”

- First and most obvious is the profile of the front cap. It’s hard to miss. On both the Arcadia travel trailer and fifth-wheel, the furthest forward point is near the top rather than at the base. While the shape of the

cap makes Arcadia instantly recognizable, the design is also functional. On the inside, the front cap design makes for a deeper walk-in closet, something uncommon in travel trailers, let alone fifth-wheels. Additionally, the unique front cap improves aerodynamics and handling while in tow, based on feed-



The Keystone Arcadia 370RL was chosen as the 2022 RV of the Year. The brand (both fifth wheels and travel trailers) is distinguished externally by the unique forward-leaning front cap, which creates added space inside the units.



All Arcadia models utilize the company's patented NGC2 chassis, which incorporates a 3-inch-tall channel running the entire length of the frame beneath the Hyperdeck water-resistant flooring. The channel allows the company to run requisite water lines, electrical wiring and ductwork between the supporting cross-members and flooring.

back Keystone is getting from transport drivers.

- Another innovation buried deep inside Arcadia is its foundation. Arcadia is the first (and only, at this point) Keystone product to utilize the NGC2 "crawl space" chassis, the brainchild of Keystone's Engineering Innovation Lab. The NGC2 features a 3-inch-tall channel running the entire length of the frame, located underneath the Hyperdeck water-resistant flooring — much like a crawl space in homes.

The NGC2 crawl space is used to route plumbing, electrical and heating ducts without navigating obstructions, and makes it possible for Keystone to add extra layers of insulation. Speaking of insulation, below the Arcadia living space are two heated chambers and three insulation layers. Water lines and heat ducts are surrounded by block foam. And underneath the frame is an additional layer of insulation. All this added insulation makes the Arcadia ideal for extended-season camping, according to the manufacturer.

- Finally, the NGC2 chassis includes a "center spine" running the length of the trailer, significantly increasing floor rigidity and strength.

"There are so many innovations in Arcadia, I almost don't know where to begin," said Arcadia Product Manager and industry veteran Jeff Rank. "For example, the shape of the front cap and the crawl-space chassis are two big ones, as is the interior look and feel, and the extra attention to detail resulting in better overall performance and a more satisfied owner."

One example of attention to detail,

Rank cited, is the CURT Performance Package, a collaboration between Keystone and CURT that's available only on Arcadia. According to Rank, pretty much everything on the suspension has been upgraded, including heavier-walled axle tubes, hubs and bearings, forward self-adjusting brakes, extra-thick shackle links, wet-bolts with bronze bushings and rubberized equalizers. In addition, the package comes with a 6-year warranty — yes, you read that right — that is not pro-rated.

Interiors in Arcadia are another strong selling point. The décor features white cabinetry, butcher block countertops, a farmhouse kitchen sink, Roman shade window treatments, and residential-style furniture exclusive to Arcadia. Overall, the contemporary residential look has been a massive hit with consumers, according to Keystone executives.

Another interior feature we really like is the taller interior headroom and flat-floor slideouts. Not only do the flat-floor slides eliminate the awkward step-up in the floor, but they make for a taller slide room, which gives a more spacious impression to the Arcadia interior. In our opinion, it makes the interior feel more like a home than an RV.

Storage in the Arcadia also has been optimized to utilize every square inch of space, like in the kitchen with numerous drawers, shelves and butler's pantry. Another great example is the flip-up butcher-block kitchen island workstation — with USB and power receptacles right where you need them — which also serves as a buffet or snack sideboard and is a focal point of the kitchen.

Exterior storage has also been reimagined with every nook and cranny put to use, and compartment interiors are finished to automotive standards, said Keystone managers. In addition, an "All-in-One" convenience center isolates all wet bay functions and includes a power tank fill, which is said to speed up the time it takes to fill your freshwater tank.

Staying with the "more is more" theme, the Arcadia 370RL bedroom offers an 84-inch ceiling height, extra-large front walk-in closet, dresser, flip-up bench with even more storage, and a California King bed with two drawers below (four, on fifth wheels). The fixed bed base also allows an auxiliary freshwater tank on some fifth-wheel floorplans, appealing to frequent

boondockers.

Speaking of boondockers, with campgrounds often fully booked, Keystone anticipates Arcadia buyers will want the capability to go off-grid with all the convenience. So, like other Keystone brands, Arcadia offers several different factory-installed and warranted solar packages, including the standard Solar-Flex 200 or the upgraded 400i, which includes two 220-watt roof-mounted solar panels, a Victron Smart Controller, 2000-watt inverter, and other goodies.

Currently, the Arcadia website shows four fifth-wheel floorplans and two travel trailer floorplans. Three-quarter ton fifth-wheel models include the 3660RL rear living, mid-kitchen floorplan, and the 3940LT with center living bunkroom loft model and one and a half baths. Half-ton models consist of the 3250RL with rear living and the 3370BH with a double bunk. Current Arcadia travel trailers include the 370RL and the 377RL.

All are classed as luxury models. MSRP for the 36-foot, 10-inch 370RL is \$68,000. However, added Rank, additional product innovations are in the works — and the company is expanding beyond the luxury segment, designing more floorplans to take advantage of the NGC2 chassis' capabilities.

keystonerv.com



Arcadia also boasts a wealth of storage inside and outside — including behind the TV in the lounge area.

Ember RV Overland Series Micro ROK



Founded earlier in 2021 by a partnership of longtime industry professionals — including President & CEO Ashely Lehman and COO Chris Barth — Ember RV introduced the Overlander and Overlander Micro Series single-axle adventure campers for 2022.

The Micro Series features two models — the ROK and ROL — and both check in at 12 feet, 8 inches long and under 3,500 pounds (UVW). The difference? The ROK (Rear Outdoor Kitchen) and ROL (Rear Outdoor Locker) floorplans give owners the freedom to decide how they want to use their

space.

The ROK includes a well-equipped outdoor kitchen featuring a galvanized-steel countertop with pull-out griddle shelf, a portable 12V/120V compact fridge/freezer combo with dual zone cooling, and a 12V HDTV with Bluetooth-enabled soundbar.

Found on all Overland models — and the centerpiece of Ember's solid foundation — is a unique chassis constructed of heavy-duty reinforced steel tubing instead of a conventional I-Beam frame. This rugged design creates additional torsional stability for improved off-road performance and durability. Ember's chassis is supported and reinforced by the all-new, integrated CURT Independent Suspension (IS) System, featuring a high-performance, axle-free design: road-dampening shocks and cushioning springs provide a smoother ride than traditional spring axles while performing better than

expensive torsion axles. Add to that 16-inch nitro-filled Goodyear Wrangler Workhorse tires featuring an integrated tire pressure monitoring system (TPMS) that comes standard as part of Ember's OneControl smart RV system.

In addition, Ember has incorporated a new VersaCoupler Height-Adjustable Bolt-On Hitching, which accommodates articulating hitches as well as a wider variety of tow vehicles with less need for adjustment. An all-new parking brake integrated onto the frame replaces traditional RV wheel chocks and locks the camper in place — it even includes a padlock security option. Other standard features include an upgradable solar package (one 190-Watt Go Power! roof panel, 30-Amp PWM charge controller, 1000-Watt inverter).

emberrv.com



East To West Ahara 365RL

The all-new Ahara luxury fifth-wheel brand from East To West RV, a division of Forest River Inc., joins an East To West towable lineup that includes the mid-profile Tandara fifth-wheel and three travel trailer brands: the stick-and-tin Della Terra and private-label Silver Lake (exclusive to Gander RV & Outdoors) and the Azdel-sided Alta. The company also launched its first Class C, the Entrada, in May of this year.

“What we've done is we've taken all the things our customers love about the Tandara, kept that in Ahara, and then added 10 to 15 high-impact features to take it up in that luxury segment,” said Mark Krol, East To West sales manager.

Some of those features include a



drop-frame, pass-through storage compartment, six-point hydraulic auto-leveling system, high-gloss fiberglass exterior sidewalls, bigger G-rated tires, bigger axles, three air conditioners, dual awnings and a taller front bedroom.

“And then there are a bunch of other little touches on top of that,” Krol added. “In East To West fashion, we do one décor — Barrington Maple. We think that's the biggest selling point of this coach.” The galley area also boasts plenty of storage, including a double-door pantry/closet, as well as refrigerator access while the slides are closed and a solid-surface countertop extending all the way across the kitchen slideout.

Upstairs, the floorplan offers 6 feet, 6 inches of headroom and a double-entry bathroom. The bedroom features a slideout with a stationary base, similar to a Class C, where the slide only moves from the mattress up. Plenty of storage and a stackable washer/dryer closet are also included.

The brand launches with two rear-living floorplans: The Ahara 365RL is 36 feet 10 inches long and weighs in at 16,000 pounds. The second floorplan, the 325RL, is 34 feet, 10 inches long with a GVWR of 15,500 pounds. All Aharas are 101-inch wide-bodied units. MSRPs start in the mid-\$80,000s.

easttowestrv.com

Winnebago EKKO with Pop-Top Roof

At first glance, Winnebago's new EKKO may seem familiar. All-wheel drive. All-season capability. Rugged outdoor bike rack. Are you sure this isn't the Revel? But a closer look at the details and a glance up at the top of the Ford Transit chassis will draw attention to some more luxurious details as well as an upgraded sleeping space that reveals this vehicle is indeed a small

Class C rather than a Class B.

The optional pop-top sleeping area definitely garners the most attention. It not only provides additional sleeping capacity — accessed by a ladder, it adds a 52- by 79-inch sleeping area to the rear twin beds — but it also lends an open, airy feel to the otherwise small motorhome when it is open.

Extra storage racks, the bike garage



in the back and storage compartments below the living quarters provide ample space for campers who are more on the go. In addition, EKKO has a 50-gallon freshwater capacity.

The all-season package for the EKKO provides protection for anyone using the all-wheel capabilities to go skiing, for example. With all tanks and water lines inside the coach above the floor, extensive all-season insulation in the roof, walls and floor, dual-pane acrylic windows and multiple insulated exterior compartments, the camping season doesn't have to end when the temperature drops. Even the drainage system is insulated and heated.

The Winnebago EKKO 22E is 23 feet, 2 inches long and 10 feet, 6 inches tall. EKKO also features a dry bath with a cassette toilet along with an innovative pivoting shower wall and removable flooring to keep the toilet area dry. EKKO is equipped with lithium batteries and 455 watts of solar power from three solar panels. The vehicle also has a second alternator that allows the batteries to recharge any time the engine is running.

winnebago.com

Heartland Cyclone 4014



During September's hybrid "Open House" program showcasing 2022 models, one Heartland RV unit quite literally stood out from the others. In fact, the big triple-axle 2022 Cyclone 4014 fifth wheel toy hauler overshadowed everything around it. "It's the biggest RV we've ever built at Heartland," said Heartland RV General Manager A.J. Jones.

The numbers alone bear this out. Called a "luxury crossover," the wide-body (101 inches) Cyclone 4014 stretches some 46 feet, 7 inches, tip to tail — nearly a foot longer than its closest Heartland sibling — and carries the kind of weight rating (a 21,000-pound

GVWR) that requires a tow vehicle with nomenclature like 3500HD in its name.

The biggest number, though, is only evident when the Cyclone's three slideouts are deployed: the 4014 boasts 480 square feet of living area. That, if anyone is keeping score, is 50 square feet more than the biggest floorplan any RV builder ever rolled out before the RV Industry Association (RVIA) in March 2020 rescinded its Board-mandated limit of 430 square feet for fifth-wheels in set-up mode.

Much of the added length has gone into developing a "true" 14-foot garage, Jones noted, to accommodate the largest of the popular UTV off-road

machines. Along the way, power outlets were added to the garage, as was a full second bath. Segmented loft sleeping units sit atop the area, accessed by either the garage or main cabin.

In addition to stretching the Cyclone, which is expected to carry an MSRP of about \$150,000 fully loaded, Heartland picked up additional space by redesigning the toy hauler's front cap. Additional features include moving the entry door to the living area in the curbside



slideout and a rarity in toy hauler living spaces: a cross-conversational seating area in the main area with sofas in opposing slideouts. The main bath is on the upper deck and is accessible by both the main cabin and the master bedroom.

heartlandrvs.com

Forest River No Boundaries 10.8

The No Boundaries line by Forest River Inc. is certainly living up to its name with the 10.8 model, an out-of-the-box RV if ever there was one. The 10.8 defies description, but here goes: It's a cross between an open-framed cargo trailer and a powder-coated steel platform with a rooftop tent. Mix in a powered cooler/freezer, 40-gallon fresh-water capacity, self-supported 270-degree awning, flexible solar panels and a Goal Zero Yeti 1500X Portable Power Station, and you have yourself an RV unlike anything you've seen before.

"We're kind of redefining that sharp edge of what's possible in lightweight campers," said Cody Schade, product sales manager. "This is a 25-foot completely powder-coated open-top frame, and from the chassis down it's exactly like a common RV with its I-beam frame, dual torsion axle suspension system, four corner stabilizer jacks and 40 gallons of fresh water." But on top of that chassis is where the 10.8 defies description.

For example: a four-seat Polaris RZR

ATV can drive right up onto the chassis floor via the rear flip-down loading ramp. Gear boxes on either side of the unit feature a powered Truma cooler/freezer and outdoor kitchen on one side and the Goal Zero power station on the other. Another gear box on the A-frame is for additional storage as well as two 20-pound LP tanks. Meanwhile, the front of the 10.8 features the afore-mentioned platform with a 1,500-pound weight capacity, easily

capable of handling the rooftop tent and anyone it would sleep. When the tent and its king-sized bed are deployed off the side, below is another tent for privacy or waiting out the rain.

The real feature, Schade pointed out, is the 10.8 weighs just 2,800 pounds, so even when fully loaded – including a four-seat RZR – it's less than 5,000 pounds.

forestriverinc.com/no-boundaries



Fleetwood Frontier 36SS

REV Recreation Group has introduced the all-new Fleetwood Frontier for 2022. The Class A diesel motor-home debuts with two triple-slide models — with the 36SS earning accolades as a Top Debut.

The 36SS floorplan features many in-demand elements: a full master bath with a large 50-by-28-inch solid fiberglass shower with shower seat and glass enclosure; a convenient half bath with a vessel sink to provide more countertop space; Adap-Table Dinette;

and an extra-long custom sofa book-ended with two reclining theater seats from Roadwire. In the entertainment area, the 111-inch-long sofa allows an adult to comfortably lay down to watch TV while providing plenty of room for a companion to relax in the adjoining recliner. The Adap-Table deserves additional mention as it provides dual functionality. When flush against the wall, it's a convenient workstation or breakfast bar for two. By swinging the table out vertically, it easily hosts a

dinner party for four. Both models feature a full flat floor, a design innovation that's uncommon in the industry, especially in a diesel coach. For owners, there's no need to step



up and over the engine compartment. Additional improvements are in the master bedroom suite, where there's extra space around the king-sized bed plus a dedicated console for CPAP storage.

Both Frontier models come equipped with the Aqua-Hot 250D tankless water heater to provide ultra-convenience and comfort. The system delivers unlimited hot water and replaces the water heater and furnace, eliminating the need for propane onboard.

In addition, Frontier comes with upgraded standard features including hand-laid solid vinyl Tarkett flooring, residential stainless-steel refrigerator, induction cooktop, convection microwave, solid surface countertops and pantry storage. On the exterior, each model has an entertainment center with an LED TV and oversized patio awning. fleetwoodrv.com



Alliance Avenue

The latest news from Alliance RV is the all-new Avenue, a mid-profile fifth-wheel positioned for the 2022 model year.

The Avenue is a “huge deal for us and our company,” said Coley Brady, Alliance co-founder. “We have taken the last 12 months to really critically evaluate that whole mid-profile fifth-wheel segment in the marketplace. We’ve not only gone to our dealer base and gotten feedback from them, we’ve also gone to the end consumer. And after surveying the landscape, we’ve really come out with a fresh perspective



and fresh product with the Avenue.”

Avenue’s key features include its 101-inch wide-body configuration and best-in-class running gear. “On top of that, we’ve done some things with the exterior and interior look that we feel offers a fresh perspective,” Brady added. “And then we’ve done some things construction-wise, too — not only with the wide-body, but with a laminated floor,” he continued. “We’re hitting the weight — ranging from 9,000 to 12,000 pounds UVW — which is so important these days for the end consumer.”

Co-founder Ryan Brady noted the Avenue launched with four floorplans — with more to come — in lengths ranging from 33 to 39 feet, a length that Alliance believes will slot nicely in the ¾-ton tow vehicle segments. “I think the important thing, to



reiterate, is what we really focused on in the last 12 months and how this new line is differentiated in the market. If you look at the features and the look, it is absolutely different from our key competitors out there,” Ryan Brady said.

Lengths range from 33 feet, 3 inches to 39 feet, 5 inches, weighing from 11,995 to 14,400 pounds. MSRP starts at \$68,000. Alliance is planning to introduce a shorter model as an Avenue sub-brand in the first half of 2022. Lengths will range in the neighborhood of 28-32 feet.

alliancerv.com

Coachmen RV Cross Trail 20XG



The big thing for the third generation of the Cross Trail 20XG, said Nate Saunders, Coachmen’s national sales manager, is that it’s now offered on a 3.5-liter EcoBoost Ford Transit with all-wheel drive.

The 20XG is ready for boondocking, he continued, with a power system that features 640-amp hours of lithium battery by Lithionics, 380 watts of roof-mounted solar panels and dual 150-amp alternators on the Transit engine.

“So, whether you’re driving down the

road or idling, whenever that engine’s running it’s charging the batteries. We’ll run everything in the coach off of lithium power. You’re going to get six plus hours of full usage off a full

charge,” Saunders said. “Then if you’re at a campground and you have 30-amp service that you can plug into, you’ll charge batteries that way as well.”

Another highlight of the 20XG is its rear cargo area, which runs the full width of the 91-inch-wide coach and is large enough to store two bicycles with plenty of room left over. Above that cargo area is a powered 54-by-80-inch bed that raises and lowers to maximize the storage space. Also, an available package is more geared toward the off-road customer and includes a two-inch lift

kit, all-terrain tires, black rims, running boards, front grill guard and a more aggressive-looking graphics package.

The interior of the coach, said Saunders, was inspired by European campervans. “We’ve taken some different design cues doing different wood grains than what is more of a traditional Class C. It’s more modern, more European, and it really opens up the size of the coach. Since it is a smaller coach, having an all-white interior really helps make it feel bigger,” he said, adding the 20XG offers a full-bath — not the wet bath normally found on motorhomes this size.

coachmenrv.com



Cruiser RV Hitch 18BHS



When Cruiser RV opened for business in 1988, it was a builder of small, lightweight travel trailers. While the product lines have grown as the company itself evolved, the introduction of the single-axle Hitch line last September brought Cruiser back to its roots — “and we think we’ve knocked it out of the park with our Hitch product,” said Senior General Manager John Jones.

Designed with an obvious eye to off-grid living with its increased ground clearance and aggressive off-road

tires, the Hitch lineup has expanded to three floor-plans in 2022, with a fourth set for production in December. The newest of these is the 18BHS, a 20-foot, 6-inch unit that, while being the shortest in the line, features the first slide-

out in the Hitch brand. Like its Hitch brethren, the 18BHS comes fully equipped; its only options are a choice of a new kayak carrier system (it will carry two kayaks vertically mounted at the rear) or a rear-mounted storage box. Everything else — from the 110-watt solar panel, 1,200-watt inverter and charge controller to the electric awning, 4G-capable Winegard 360 Air Pro, gas/electric 4.7-cubic-foot refrigerator, solid-surface countertops, 14,500-Btu AC, 20,000-Btu furnace,

USB charging ports throughout and even a sink cover — are standard. So, too, are what Jones called the largest tanks in the segment: 46 gallons for freshwater and 30 gallons for both the grey- and blackwater holding tanks. And then there’s the matter of storage. “When campers go off-grid, they tend to stay out for longer periods of time, so storage is key,” Jones said. “The Hitch has the largest pass-through storage (in its segment) in the industry.”

All this happens in a unit retailing at about \$30,000 with a 4,700-pound GVWR. “An RV is a big investment,” said Jones. “Hitch is not only functional, but buyers can tow it with their small crossovers or SUVs.”

cruiservv.com



Entegra Coach Launch/Jayco Terrain

With an eye on off-grid and off-road adventure, Entegra Coach has unveiled the all-new 4x4 Launch built on the Mercedes-Benz Sprinter chassis. Like its sister model the Jayco Terrain, the Class B Launch features on-demand four-wheel-drive that provides extreme flexibility for on or off-road adventures. The Launch also provides features and styling of a larger motorhome — including a luxurious interior and enhanced off-grid performance from a 48V lithium power solar system.

“Since our entry into the van segment we’ve seen tremendous growth. The 4x4 space seemed like an obvious next step for us and we’re all extremely

excited with what we’re bringing to market,” stated Nic Martin, General Manager Entegra Coach & Jayco Motorized Group.

With notable standard chassis and exterior components, the Entegra Coach Launch exceeds Class B expectations. Including aluminum wheels with BF Goodrich All-Terrain T/A KO2 tires, 220-amp alternator, 48V Coleman-Mach 10 air-conditioner, Carefree armless power patio awning with LED light strip and wind sensor, double roof rack with moveable ladder, on-board air compressor with front and rear chucks and the E-Z DRIVE ride and handling package (featuring Koni shocks and a heavy-duty rear stabilizer bar), this is truly a full-featured coach.

The well-appointed interior offers custom-molded, vinyl-wrapped ABS interior wall panels, Tecnoform European-style cabinetry, a 3-cubic-foot DC refrigerator, hydronic heating system with LED



touchscreen control, multiplex system powered by Firefly and a portable induction cooktop. The power system includes 200 watts of roof-mounted solar panels, 48V, 210-amp hour smart lithium battery providing 10.2KW of power, 3500W inverter and a second 48V alternator dedicated to the lithium battery. The new Entegra Coach Launch MSRP starts at \$192,000 and is offered in two optional paint schemes: Aztec partial paint (Silver van only) and Forest Glade partial paint (Sandstone van only).

entegracoach.com

KZ RV Durango D311 BHD

The Durango D311 BHD is an all-new floor plan for 2022 by Shipshewana-based KZ RV, a THOR Industries Inc. subsidiary. "It's a bunkhouse floorplan, but really, I guess kind of the brainchild started last year and we thought, 'what could we do that would be really cool and different?'" said Brent Frohman, KZ RV general manager. Using the hot-selling Durango half-ton series as a starting point, he added, "We really tried to think outside the box."

What he and his team came up with is a floorplan with dual motorized bunks in a room at the rear of the fifth wheel inside a hatch door. The two



56- by 80-inch beds are raised and lowered via a Happy Jack setup. "Nobody in North America has ever done two beds," Frohman said. "There's a switch that actually runs them up and down."

When the beds are in the up position, the 6- by 6-foot room, equipped with a television, is available to store bicycles or a kayak while on the road and then can be used as a patio once at the campsite.

Inside, more whites and gray tones brighten the upgraded interior and the kitchen features a 24-inch oven, convection microwave and 12-cubic foot gas-electric RV refrigerator. KZ went with name-brand entertainment components, including a JBL soundbar and Sansui TV, Frohman said, adding, "all of our TVs are smart TVs this year."



The bedroom, meanwhile, houses a king-size bed while the bathroom is equipped with a one-piece fiberglass shower.

A premium solar package is available, offering 440 watts of solar panels on top, expandable to 880, with a 240-amp hour lithium battery, a 30-amp MPPT solar charge controller and a 2,000-watt inverter. The aluminum-framed 35-foot, 2-inch Durango D311 BHD weighs 10,170 pounds unloaded. MSRP will be in the mid-\$70,000s.

kz-rv.com

Mission Overland Summit



Striking a balance between rugged construction and meaningful design, the Summit trailer by Mission Overland in Alberta, Canada, meets the mark when it comes to comfortable camping and serious off-road terrain.

The growing trend to go farther off-road in the RV segment prompted Mark Badgerow, designer and founder of Mission Overland, to design the first teardrop-sized camper with major off-

road capabilities — one that you also can stand or sit upright inside.

While those features are a major differentiator in this market, the Summit also boasts many systems that allow for comfortable off-grid adventures. These include a 37-gallon freshwater tank and propane-fueled forced air heating and hot water system by the industry-leading Truma Combi as well as a 12-volt DC Truma dual-zone 69-quart refrigera-

tor. The slideout kitchen offers hot water at the sink, as well as a dual-burner propane stove for cooking in the great outdoors. The Summit can accommodate sleeping up to four inside.

Coupling those attributes, along with independent suspension by Timbren, 1.5-inch foam-filled aluminum composite walls, full skid-plated chassis, 33-inch tires and a fully articulating hitch, this trailer was designed to take camp-



ers where they want to go, in comfort. This complete package weighs in at a nimble 2,350 pounds, which means it is easily towed by most vehicles. But make no mistake, no short cuts were taken to construct this fully RVIA-certified camper.

missionoverland.ca

Forest River Palomino Backpack Edition 2012

For 2022, Forest River's Palomino group has introduced a truck camper with — get this — a fold-down rear patio. The Palomino Backpack Edition 2012 features a 7-by-8-foot patio deck off the rear of the camper, easily making it one of the most unique applications of an elevated RV patio ever seen.

"The goal back when we started toying with this idea, was to think about how people use truck campers — and we thought it'd be great to be able to fish off the back of it, or hunt off the back of it, or take it to a race-track and just be up off the ground and have your own little extra living space," explained Ben Meloche, general manager.

The rear patio also features an outside refrigerator and TV entertainment area, making it quite the spot for enjoying the great outdoors.

"It sounds strange, but everyone is super excited because, again, it's out of the norm. It's something they haven't seen," Meloche said, adding the rear patio carries a 1,500-pound weight



capacity.

Designed to be carried by a 1-ton truck with an 8-foot bed, the 2012 weighs in at just under 3,500 pounds — which is only 17 pounds heavier than what previously had been Palomino's heaviest truck camper. When deployed into patio mode, the 2012 measures 20 feet in length. As far as the interior of the truck camper itself, Meloche said it comes fully loaded including solid sur-

face countertops, couch and TV, among other amenities.

While the camper itself is a side entry, access to the rear patio is from inside the unit. "Our main focus in our truck campers has been rear entry, but with this floorplan we didn't want customers to have to put the ramp back down to get into it," Meloche pointed out.

forestriverinc.com

Thor Motor Coach Tranquility 19P

The Tranquility Class B motorhome evokes an adventurous lifestyle with off-road capabilities. The Mercedes-Benz Sprinter 2500 passenger van with a 4x4 platform and optional all-terrain tires improves road adhesion and handling to any destination, while the 6-cylinder diesel puts out enough power (188 horsepower and 325 pound-feet of torque) for all weather conditions.

Impressive safety features include a top-mounted LED light bar with a cover, keyless entry, a back-up monitor and



adaptive cruise control. In addition, convenient hands-free control of Apple CarPlay and Android Auto on the large 10.25-inch MBUX multimedia screen is integrated with the tilt and telescoping steering wheel's control buttons.

Tranquility's two floorplans, the 19P and 19L, highlight the modern ruggedness of the 4x4 chassis. The 19P floorplan has rear bench-style seating with seat belts for three that electronically unfolds into a sleeping area. With an enclosed wet bath, ample kitchen, and forward seating, the 19L also features an available Froli sleep system in the rear sleeping area and features large pull-out side trays. Both floorplans have Tecnoform Euro-style cabinetry, available in either "Metallic Gray" or "Radiant Silver," with corresponding cool-tone interior décor.



Rear and entryway screen doors and large opening side windows provide fresh air and plenty of natural light, making the transition from indoor to outdoor living seamless. An exterior table folds out directly underneath the Thule powered patio awning. Portable or wall-mounted, a JBL Flip speaker plays high-quality audio once connected via Bluetooth to a favorite device or smartphone.

The Tranquility is destined to get off-the-grid with a 190-watt solar panel to help maintain a charge on the Re(Li)-able lithium battery package. The system's 400-Ah lithium battery comes with a Balmar 170-amp alternator, delivering plentiful charging capabilities even at idle. And, for places a motorhome cannot go, travelers have a standard Thule bike rack with room for two adult-size bicycles.

thormotorcoach.com

Grand Design Reflection 341RDS

The Reflection brand of travel trailers and fifth-wheels has long been a stalwart for Grand Design RV Co. With eight fifth-wheel models and three travel trailer configurations — not to mention the six fifth-wheel units in the 150 Series designed for half-ton trucks — the Reflection certainly has something for just about everyone.

Even still, Grand Design has come out with the 341RDS model in the standard fifth-wheel line. Just shy of 37 feet long with a UVW pegged at 10,910 pounds, the 341RDS is a three-slide, rear-den fifth-wheel that is all about

comfort and functionality.

The rear den features opposing slides housing tri-fold sofas that flank the rear entertainment center, offering a 50-inch TV above a 48-inch fireplace set opposite theater seating. The off-door sofa slide also contains the kitchen pantry, microwave, stovetop/oven and 16-cubic-foot refrigerator. A center island with stainless-steel sink as well as a dining area complete the mid-fifth wheel layout.

For the dining area, Grand Design has incorporated a sliding table system that offers a wide range of flexible uses. “With people working remotely, e-learning or even just people that like to do a lot of entertaining with guests inside of the unit, we wanted to create a space in the kitchen that can be converted from a table and chairs



for four people to sit,” explained Tony Lizzi, product manager for Reflection travel trailers and fifth wheels. “If there’s only two people, it can be sucked back in the cabinet base so they have more of a walkway, or it can slide from side to side to create an L-shaped desk or buffet-style serving for when you have guests over.”

Up front, the 341RDS offers a three-piece bathroom, bedroom with a 60-by-80-inch queen bed (king bed is optional) set inside the coach’s third slideout and a very large wardrobe with washer/dryer prep tucked into in the front cap. granddesignrv.com



Jayco Eagle 335RDOK



Back a few years, the big trend was for RV manufacturers to tout how many different “living zones” an RV offered — places where people could congregate. Jayco doesn’t use that terminology to describe its new Eagle 335RDOK, but that’s essentially what the builder has created in the 12,995-pound GVWR fifth-wheel, which retails for about \$86,665.

By redesigning the dining area near the unit’s entryway into a bar-height eating area with solid wood table, two bar stools and a bench — plus rais-

ing the wall separating it from the rear den — the area allows for separate conversation from anything going on in the den. It’s a great way to partially segment “living spaces” in a relatively short 37-foot, 7-inch unit.

The rear den itself was designed with maximum window area to provide as much natural light as possible. “That’s why we went with a TV on a lift,” said Jason Martin, director of product development for Jayco. “When not in use, it doesn’t cover up the large rear window.” The den also features opposing tri-fold sofas and distressed woodwork.

Jayco established the now-popular “modern farmhouse” interior, and this year is taking it away from a “country” look to a more contemporary aesthetic. Upgrades include new colors to the

vinyl flooring, solid-surface countertops and backsplashes, contrasted by black appliances (including a new 30-inch OTR microwave). There also are dabs of contrasting navy blue in the master bath.

Outside, all Jayco units are now prewired for an inverter. If, like the 335RDOK, the unit comes with an outside kitchen, the refrigerator is wired to the inverter for the RV’s residential refrigerator — so it’s cold by the time you get to your destination. The outside kitchen also includes a griddle and platform tying into the G-port hitch-receiver system. The fifth-wheel also sports internal tire-pressure monitors that communicate with Jayco’s J-command smart system.

jayco.com



Travel Lite Rove EV



Travel Lite RV is offering two new models for 2022: The Rove SUR (sport utility RV), a toy hauler with a 13-foot garage and queen bed that weighs less than 3,000 pounds and the Rove EV, an ultralight trailer with enough solar gear onboard to keep it powered and off-grid indefinitely, according to CEO Ryan Rebar.

In partnership with supplier Way, the Rove EV is equipped with 360 watts of solar panels on top, a solar controller, two 5,000-watt inverters and a bank of

six RELiON lithium-ion batteries — for a total of 600-amp hours in the battery bank, according to Steve Holt, a tech rep from Way. Two transfer switches provide two circuits of alternating current and if a user does plug

into shore power, the transfer switches seamlessly bypass the inverters.

“We wanted a coach that you could go out, off grid, and be autonomous — for good,” Rebar said. “You don’t need to worry about gas. You don’t need to worry about a generator. With the bank of batteries, the inverter power and the solar on this unit, you can go off grid and not worry about it.”

The Rove EV specs are similar to Travel Lite’s original Rove Lite, but the EV is heavier because of the solar

options. It comes with a Perfect Aire 5,000 BTU air-conditioner that the solar system will run continuously for nine hours. Also onboard is a 3-cubic-foot, 12-volt DC Everchill refrigerator, Greystone single-burner induction cooktop and a Greystone 5,600-watt fireplace that’s rated to provide heat for up to 400 square feet.

The solar system also runs the EV’s electric tankless water heater and power awning. Other features include a wet bath, woodgrain cabinetry and solid-surface table and countertops. The Rove EV is 19 feet, 6 inches long and weighs 2,086 pounds. The \$8,000 pass-through cost of the solar package pushes the MSRP to \$34,900.

travelliterv.com



Keystone Raptor 420

Keystone RV Co. executives describe the Raptor 420 as much more than a traditional toy hauler. Sure, the 420 offers a 13-foot garage, dual 30-gallon fuel tanks, and all the accoutrements boys with their toys demand — however, this new Raptor also appeals to women, men and anyone who wants a huge amount of flexible storage and a living space that downright pampers you.

The most striking feature of the Raptor 420 is the massive upper deck bath and bedroom suite. Unlike other toy



haulers, the bathroom is located at the front of the unit. The impressively sized bathroom features a 28-by-40-inch shower, 42-wide vanity, a full-width walk-in closet with bench seating, shoe storage and shelves. An east-to-west king bed is located rearward of the bath.

Another selling point of the floorplan, note Keystone managers, is the large front pass-through storage made possible by the expanded upper deck. At 53 inches and about 5 feet in length, this is nearly twice the size of other Raptor front pass-throughs.

For its part, the living/kitchen area has a 97-inch sofa with built-in recliners, an angled entertainment center for



easy viewing, kitchen island with flip-out stools, stove, convection microwave and an 18-cubic-foot refrigerator. A half-bath is located off the garage. As for tank capacities, the 420 is ready for anything with a 94-gallon freshwater tank and 82 gallons each for the gray and black tanks, respectively.

The 420 joins a Raptor lineup of no less than nine models ranging from 39 feet to the 420’s 44-foot, 6-inch configuration. Dry weights range from 13,373 pounds up to 15,887 pounds, and exterior heights top out at 13 feet, 6 inches.

keystonerv.com

Winnebago Micro Minnie FLX

The new Micro Minnie FLX series from Winnebago Industries Inc.'s towables division is the company's first move toward upgrading electrification and efficiency initiatives, said Adam Christofferson, senior product manager at Winnebago Towables.

The FLX package, available across the Micro Minnie line, "is derived from working with our brand ambassador, Traveling Robert (Robert Morales)," Christofferson said. "Traveling Robert has over 200,000 followers on YouTube. He's a 'grassroots' guy and he is currently in his third Micro Minnie. So last year he was in a 1708FB, had some solar, had a smaller lithium



battery, had an inverter and a Truma AquaGo water heater."

But, added Christofferson, Morales and Winnebago wanted to be off the grid longer, so designers came up with an electrification package that would allow the Minnie to be unplugged and off-grid for up to five days.

"What that electrification initiative is, is a 320-amp-hour lithium battery, a 3,000-watt inverter," he said. "We have 2,190 watts of solar panels on the roof, a 30-amp MPPT charge controller as well as side-mount solar prep, so that way customers can add portable solar if they choose." Electric items on board are all the most efficient available and propane is still used — but, again, leaning toward high efficiency, include a AquaGo water heater and VarioHeat



furnace from Truma.

Other features include a queen bed, spacious galley, large private bathroom, stainless steel sink, three-burner cooktop with oven, external patio speakers and external TV hookup.

The Micro Minnie with the FLX package is offered in four floor plans — two couples trailers, a bunk model and a bunk/Murphy bed model. The Micro Minnie FLX 2108DS is 25 feet long with a 4,000-pound dry weight. MSRP is approximately \$52,000, with the FLX package adding \$13,000 to the cost.

winnebago.com

Newmar New Aire 3543



Newmar Corp. enters 2022 with plenty of demand for its 2022 model year lineup that includes seven diesel pushers, one front engine diesel, two gas-powered Class A's and two Super C's. But that hasn't stopped the luxury motorhome manufacturer from making an array of updates to its 2022 RVs.

"They're (New Aire and Bay Star) reskinned on the outside, with new front and rear caps and new instrument panels, but really it's all about the design cues on the interiors of these two coaches. Whether it's the slideout fascias, the feature ceilings, the lighting

hardware, the cabinet doors... basically all the interior design features are all new in both of these brands, and we're really excited about them," said John Sammut, vice president of sales and marketing.

As mentioned, the 2022 New Aire offers a host of new styling features including a lighted Newmar badge on the front cab. Of the line's three 35-foot models — all feature a 450-horsepower Cummins L engine and 10-inch Xcite dash monitor with the new Nav N Go navigation system — the 3543 was singled out. The motorhome features a

nearly full-wall slide along with two others on the off-door side, one of which houses the 72-by-80 king bed and the other an 87-inch sofa surrounded by panoramic windows. The full-wall slide includes a Euro-booth dinette in front of a TV on a power lift, galley-style kitchen and dresser below another TV in the rear bedroom. A three-piece bathroom opposite the kitchen completes the layout.



Sammut singled out the panoramic windows in the slideout for further mention. "These windows are not only larger, but they actually meet up with the windows in the end walls of the slide room," he said. "They appear to be one continuous window that wraps around the three sides of the slide room — it's really quite dramatic."

newmarcorp.com

Venture RV SportTrek Touring 333 VMI

A new floor plan in the Venture RV SportTrek Touring travel trailer lineup is the 333 VMI. The goal, according to Dave Boggs, Venture RV general manager, was to create the vibe of a fifth-wheel in a travel trailer.

To that end, the 333 is built around a fifth-wheel layout, with an island kitchen, plenty of counter space and hidden storage, a dinette table with a large window in the slideout, a viewing area across from the entertainment center and a living room separated from the kitchen and dining area.

The three-slide unit accommodates a king bed in the back, with a large dresser and plenty of storage, while,



outside, two awnings provide shade for almost the entire length of the trailer. Another big feature is the outside kitchen in what's otherwise considered a "couples coach."

"A lot of outside kitchens come in bunkhouses because you have kids," said Boggs. "But if you don't have kids, that doesn't mean you don't want an outside kitchen." Inside, he added, "You get the amenities of a fifth-wheel with the king-bed slide and storage back there. The bathroom's close and there's a big living area with an island kitchen." Washer and dryer prep — another fifth-wheel staple — also is included. According to Boggs, the unit is attracting buyers from across the spectrum: First-time buyers, owners moving up to a larger unit, previous fifth-wheel



owners looking to downsize and even extended-stay customers.

"The guys who want to take this on the road and do their computer work and work on the road," he said. "Basically, they can take this out and go from campground to campground, just hook up their laptop and work from here. They have all the amenities of home." The Venture RV SportTrek Touring 333 VMI is 36 feet, 11 inches long with a dry weight of 8,800 pounds. MSRP is \$62,000.

venture-rv.com

Vanleigh RV Ambition 399TH

Vanleigh RV, a division of Tiffin Motorhomes, has introduced the Ambition toy hauler to its 2022 lineup of high-end fifth-wheels that includes the Beacon and Vilano lines. The Ambition debuts with the 399TH, a 43-foot, 7-inch model featuring a 13-foot garage, 1.5 bathrooms and the same fit-and-finish found across not only the rest of the Vanleigh brands but the iconic Tiffin motorized lineup as well.

"In all honesty, the Ambition's been seven years in the making," said Chase

Davis, national sales manager. "I don't want to oversimplify it, but the Ambition is a Beacon with a 13-foot garage in the back."

The Ambition includes all the features that a Beacon has standard, Davis explained, including full-body paint, dual-pane windows and the interior woodwork finishing that people have become accustomed to with Tiffin products. Specs on the 399TH include 16,900-pound dry weight, 21,000-pound GVWR and 3,500-pound pin weight.



Tank capacities top out at 110 gallons for fresh water and 90 gallons each for gray and black.

Other notable features include (and we'll let the spec sheets take it from here): Triple 7K Axles with Westlake G-rated tires and disc brakes (optional 8K axles); Road Armor suspension; Truma On-Demand water heater; Rockford Fosgate premium audio system; Happi-Jac bed system in garage; Hidden Hinge F.A.S.T. ramp/patio; Spyder Multi-Plex; generator prep; dual 15,000 Btu air-conditioners (one with heat pump); Thule legless awnings; Super Sofa by Franklin Furniture; InterVac central vacuum system; Insignia oven; convection microwave; LG residential refrigerator; 1,000-watt pure sine wave inverter.

Oh, and there are LG "smart" TVs — in the living room, bedroom and garage.

vanleighrv.com



Winnebago Hike

While the Hike series of travel trailers from Winnebago Industries has been around for two years, the 2022 model Hike 100 series sports new designs and features aimed at solidifying its stature in the adventure trailer space.

The new unit still has the patented exoskeleton of earlier versions, said Adam Christofferson, senior product manager at Winnebago Towables, “but what we found is we were challenged within the single-axle market, with getting something that was lighter in overall dry weight so we could have more cargo-carrying capacity.”



According to Christofferson, the new lighter, more compact Hike 100 single-axle series opens Winnebago Towables up to consumers with different tow vehicles. The 16-foot Hike 13 featured here, for example, comes in at a svelte 2,700 pounds.

Winnebago took consumer desires into strong consideration when designing the new Hike including more storage, sleeping space and especially outdoor living space. Outside living space includes a standard power awning on the patio side and a manual batwing awning at the rear and off-door side providing nearly 200 square feet of covered awning space. An outdoor shower space is also included under the batwing awning. Meanwhile, the rear outdoor kitchen offers a portable induction cooktop that can be used inside or out, a convertible cutting board and sink and a Truma portable cooler, which can be taken along on excursions away



from the Hike.

Inside, there is an under-mount stainless-steel sink with a sink cover for more counter space and a high-mount faucet with a pulldown sprayer. There are no speakers inside or out, but the Hike is equipped with a portable Bluetooth speaker with a dedicated docking station and integrated USB ports. There is a cassette toilet in a newly designed wet bath. A fixed bed and a loft bed are included with a cargo net to store gear. MSRPs will start under \$30,000.

winnebago.com

Cavco Glamping Tent Cabin PMRV



While *RV Enthusiast* usually doesn't showcase park model RVs, we were so taken by Cavco Industries Inc.'s surprising twist to the park model RV segment — its new Glamping Tent Cabin (the official name is a work in progress) — that we had to include it.

Traditionally, PRMVs are hard-sided units that look like smaller versions of much larger manufactured homes, but Cavco flipped the script with this recent model that features a large, tented section on the front end — akin to more of a “glamping” structure.

“We see that there is business for glamping tents and tipis, so our thought was to build a park model, put a nice bathroom and kitchen in it and then, on the porch, give people the ability to put whatever they want on it,” said Tim Gage, vice president of park model RVs and cabins for Cavco. “This unit has a tented section, for example.”

The company teamed up with Bushtech, a safari tent manufacturer based in South Africa, to create the tented section of the unit. The tent is designed to last for decades, according

to Gage. It comes with the RV Industry Association's seal of approval and meets the size requirements to be a PMRV, he noted.

The unit features a master bath and an outdoor shower at the rear of the unit. While the PMRV does not include a full-sized kitchen, it does have a microwave, refrigerator and sink, along with cabinetry near the rear of the tented area. A queen-sized bed, along with a dresser, TV and other furniture make up the living space under the tent. There is even room for a porch at the front of the unit. An AC/heater split unit comes standard.

cavco.com [RVE](#)



Roof Water Intrusion?

Not on My Watch



When an annual inspection reveals that the skylight seal has been compromised, fixing the problem before it leads to costly repairs requires patience, care — and the right tools

By Bob Livingston / Photos by author

Skylights have been part of the RV's roof landscape for many years, offering additional height in showers and natural lighting. For the most part, these plastic domes have a good lifespan (unless, of course, you collide with a low structure or tree limb), but the seal that ensures a tight fit on the roof can deteriorate over time, requiring attention to prevent moisture intrusion. Hence, skilled service technicians recommend inspecting the roof seals annually, or immediately after any driving mishap.

When we aided a friend in examining the roof of his five-year-old fifth wheel, it was plain that the seal around his sky-

light was weathered, dried out — and a prime candidate for creating problems inside the rig. Allowing water to penetrate the roof, or any other place in an RV, leads to costly dry-rot damage and long downtimes — usually at the most inopportune times.

The skylight in the fifth wheel was original from the factory and was well-sealed, meaning plenty of “goop” applied could be found around the edges. Long-term exposure to the sun allowed the lap sealer to shrink and develop voids where moisture could eventually make its way into the roof structure. For the record, the manufacturer did a good job sealing this skylight, which further demonstrates the level of wear-and-tear

that should be expected from the intensity of the sun and continued exposure from other damaging elements.

Resealing the skylight (and any other accessory on the roof) does not require special training, but there are a few precautions to consider. First, you'll be on the roof, so it's important to be aware of your surroundings and possible trip hazards. In this case, much of the roof real estate is occupied by solar panels, so footing was important. Second, removing old sealant from a rubber roof requires patience, care and the right tools — you don't want to damage the roof membrane. Lastly, do not lean on the skylight while removing and reapplying sealant; a friend learned that



Working on the roof takes some agility when the real estate is consumed by nearby solar panels and other accessories, so be careful. After exposure to the elements for five years in a full-time environment, the sealant around this skylight was dried up and no longer capable of protecting against water intrusion.

lesson the hard way — and ended up having to replace the skylight because the plastic cracked when pushed on by an errant hand.

Removing Old Sealant

In order to properly re-seal the skylight, the old material must be removed first. Chances are your roof has an EPDM or TPO membrane, which can be damaged very easily. If you are new to this type of repair, you might consider using a plastic putty knife; steel putty knives will “dig” into the membrane easily, creating large gaps between the skylight flange and roof. The skylight re-seal for this project was completed by *RV Enthusiast* contributor Bill Gehr, who has done this job hundreds of times and has the right “feel” when using steel putty knives. Use of a plastic putty knife will slow down the process, and in some cases make it difficult to remove stubborn sealant, but it’s the safer alternative. The bottom line? Work slowly and carefully and take breaks if the job becomes too tedious.

Once all the old sealant was removed, the surface was washed with a commercial cleaner, followed with a wiping of alcohol. At this point, you can elect to use a lap sealer designed for your roof type or seal the flange to the roof with EternaBond tape; for this project the latter was chosen. EternaBond (<https://amzn.to/3lPplBP>) is some of the stickiest stuff on the planet. It was originally designed to seal pipes underwater, so weather has little

adverse effect on its ability to provide a tight seal. Granted, EternaBond is expensive, but if you use this tape you’ll likely never have to re-seal the skylight again unless it becomes damaged and needs to be replaced. And that’s the caveat: it’s brutal to remove, which is why it does such a good job sealing out moisture. If it becomes necessary to replace the skylight, the only way to get it off the roof is to cut the tape at the



Obviously signs of cracking in the original sealant was a red flag and led to the decision to remove the old sealant and replace it with EternaBond tape.

edges of the flange with a razor knife (and exposing the screw heads will take some time and patience). Nevertheless, it’s normally a “re-seal it and forget it” proposition.

For this job, 4-inch-wide black Eterna-Bond tape was chosen because it provided good coverage on the flange and roof surface. A 50-foot roll sells for around \$70, which is obviously more than needed for the skylight re-seal, but that’s okay: This tape has many uses around the RV. Other items can be re-sealed on the roof, and in the event of a mishap where the roof membrane is compromised (think collision with a tree branch) a temporary — or even permanent — repair can be made on the spot. It’s the most versatile tape you’ll carry in your tool arsenal.

Applying the tape takes some thought and should be done in sections. This is not the easiest tape to work with, and you’ll only get one shot at placement; once the adhesive touches any surface, it pretty much cannot be moved. But it’s not hard to do it right. After cutting the tape to the needed length, it’s laid down to confirm the fit. Then the liner protecting the adhesive is removed, which can be maddening if not done correctly. Simply scrunch the leading edge of tape using two hands until the protective liner separates enough to get a grip and pull back a manageable length of liner. Carefully position the tape on the flange/roof and work it to the other end while continually pulling back the liner; the process is repeated until all four

sides are covered. Be sure to cut the sections so that the ends meet without unnecessary overlap — not exactly critical, but the final job will look better.

The key to ensuring that the adhesive sets up properly is to roll the

tape so that contact is uniform. Steel EternaBond rollers for this purpose are available from Amazon (<https://amzn.to/3m0FEHR>) or other tool sources, but we couldn't find ours, so we improvised by "ironing" the tape surface with the

head of a hammer. After about an hour, the job was completed and the skylight once again was protected from exposure to the elements, including water intrusion.



Removing the old sealant requires a certain skill set to prevent damaging the EPDM roof membrane. For this project, RV Enthusiast contributor Bill Gehr banked on his 30-year-plus experience as an RV technician and used a steel putty knife to remove the old sealant. A plastic putty knife can be used but it's not as effective.



A hammer can be used to "encourage" dry, hard sealant to break loose, but don't get carried away. It's easy to misdirect the putty knife and damage the roof membrane.

A smaller steel putty knife was used to get a better feel when removing the old sealant around the screws.



Once you get into the rhythm, the old sealant will peel off in large pieces.

Screws holding the skylight to the roof are tightened, where necessary, to provide the best possible uniform surface for applying the new sealant or, in this case, the EternaBond tape.



It's best to make the surface transition from the skylight flange to the roof membrane as smooth as possible. The smaller putty knife did the trick. The edge of the smaller putty knife was also needed to cut the old sealant around the skylight flange without digging into the membrane.



If you have other rooftop accessories, special care is needed to remove the old sealant that may have "mixed" with the sealant applied to (in this case) the solar panel brackets.



Since the skylight was so close to the edge of the roof, it was necessary to climb on a ladder and carefully work from the outside.



Once the sealant was completely removed to the technician's satisfaction, the surface was cleaned to gather any loose pieces of material, residual dirt and debris.



10

Once all the old sealant was removed, it was collected from the roof and piled in a corner for disposal. You don't want this stuff sticking to the membrane.



11

While working around the skylight, refrain from leaning on the dome for support. Doing so will risk cracking, especially if the plastic has been exposed to the sun for many years. If that happens, you'll have to replace the skylight.



12

The last step before applying new sealant or EternaBond tape is to clean the surfaces with alcohol. Be careful not to saturate the roof membrane.



13a



14

Removing the protective liner from the adhesive takes some practice. The best method is to scrunch the leading edge of the tape using two hands until a small amount of liner is released — then simply pull off the desired length of liner.



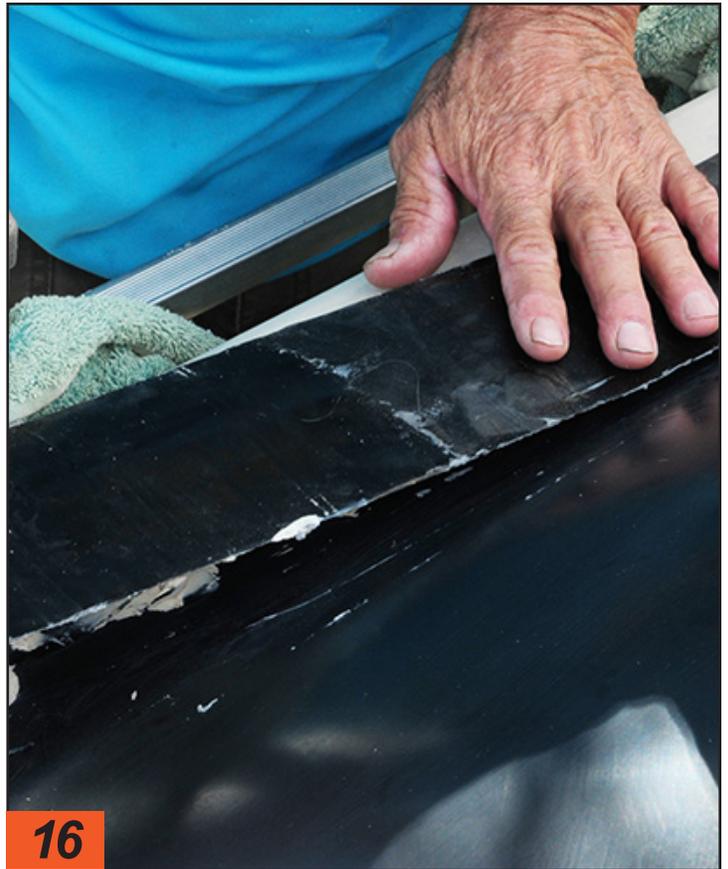
13b

Four-inch-wide, black EternaBond tape provided a good amount of overlap for the skylight flange and roof membrane. The EternaBond tape was rolled across each side of the skylight to determine the right length and then cut with scissors.



15

Remove just enough liner to position the tape on the seam and continue to pull the liner free from the adhesive as the tape is applied.



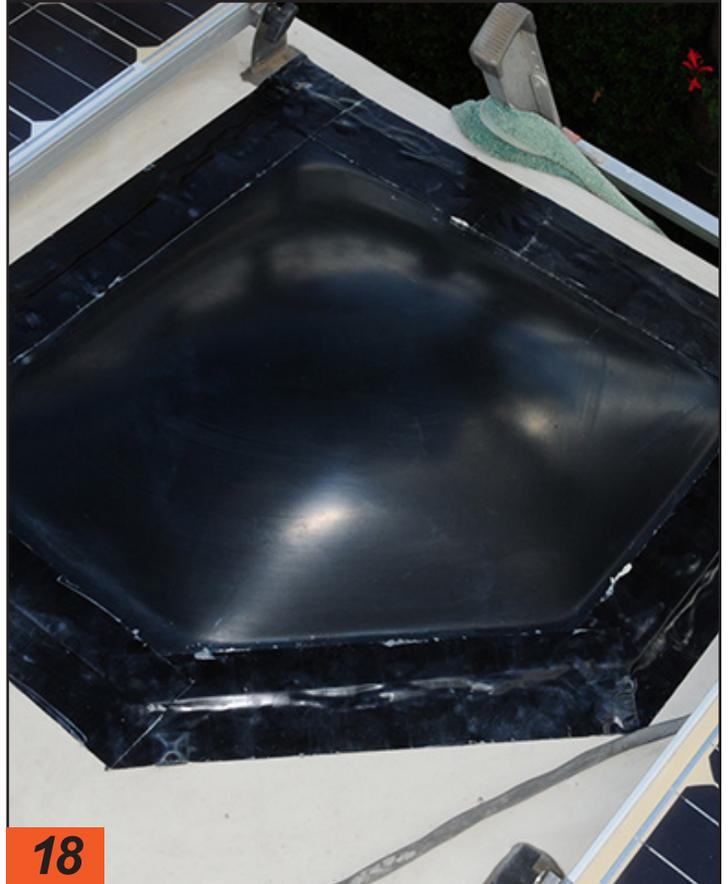
16

EternaBond tape is incredibly sticky, so you only get one chance to apply it correctly. Once it touches the surface, it's there for the duration.



17

EternaBond markets a steel roller to set the tape and allow the adhesive to bond properly. In lieu of the roller (which we couldn't locate), a hammer head was used to "iron" the tape to the surface. The hammer actually worked better than we expected.



18

It took about an hour to remove the old sealant and apply the EternaBond. Owners can expect this seal to last for many years.
RVE

COLD AGAIN



When the original absorption-gas RV refrigerator stops functioning, the easiest fix may be a factory replacement

By Chris Hemer / Photos by the author

It wasn't so long ago that the absorption refrigerator was pretty much the only choice when it came to keeping food cold. I remember my first RV trip, and our own Bob Livingston told me, "Now, remember: Start the refrigerator the day before your trip and only put cold food in it, or it won't be cold when you get there." That one took some consideration. It made no sense to me why I couldn't just turn it on when I needed it — or for that matter, why I had to turn it off at gas stations or in tunnels, or why some people recommended not traveling with it on, ever. What is the point of having a refrigerator at all, then?

Today, of course, technologies have made it easier than ever to install a residential 120-volt AC compressor

refrigerator in an RV, and there are growing numbers of 12-volt DC compressor models available, as well. But if you're faced with an absorption-gas refrigerator that no longer works, one of the easiest ways to get going again is still with a direct replacement model. This may not seem as glamorous as upgrading to a larger model, a unit with an icemaker or a compressor-equipped model, but if you're doing the job yourself, direct replacement is a pretty attractive option. There's usually no need for fabrication, electrical work or LP-gas line re-routing/modification, which saves a lot of time and aggravation.

Depending on the model and how old it is, Dometic and Norcold can suggest a replacement model that will fit in the existing space and require little, if any

modification. In fact, Norcold has conversion charts on its website (norcold.com) that will help you find a suitable replacement for your existing Norcold or Dometic refrigerator.

While replacing the original unit isn't terribly difficult, it does require some due diligence to protect yourself against unforeseen problems. First, make sure you get the model and serial number off the original unit and contact the manufacturer to double-check that you're about the order the right unit or a suitable replacement. Next, measure the doorway to see if it is wide enough to accommodate the swap — you might be surprised to find that it's not. In all probability, the factory installed the appliances before the sidewalls were erected or may have completed final

assembly inside. As a consequence, it may be necessary to take off the refrigerator door(s) to squeeze the replacement through the RV's entry door (and remove the old one). When that doesn't work, another option is to complete the swap by removing a side window (or

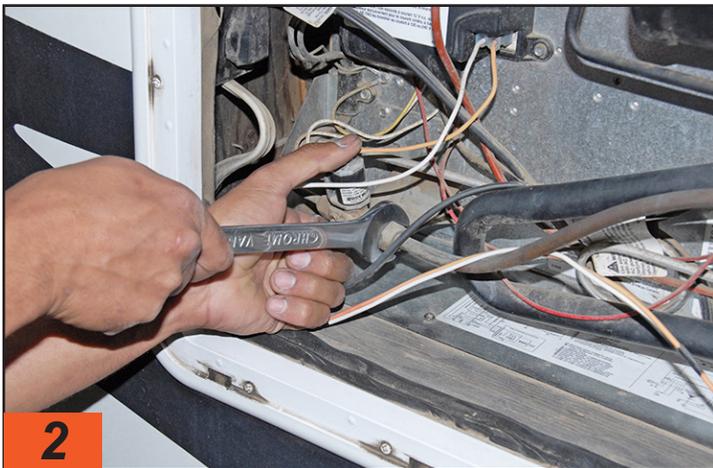
even the windshield in some motorhomes) and enlisting the muscles of a friend to route the old and new refrigerators through the resulting cavity.

That proved to be the case with a customer's Class C motorhome brought to C&S RV Service Center in Oxnard,

California, for a replacement gas-absorption refrigerator. Though the job appears daunting, it didn't take much longer than an hour for one technician to complete — okay, with a little help from an associate during the heavy lifting.



The first order of business is to make sure the non-functioning refrigerator will be able to fit through the entryway of your RV. In this Class C motorhome, the refrigerator measured 24 inches wide — but the door opening was only 22.5 inches wide. The large living area window, however, was more than 26 inches tall, so it was removed (and later reinstalled—see sidebar) in order to swap the appliance for a replacement unit.

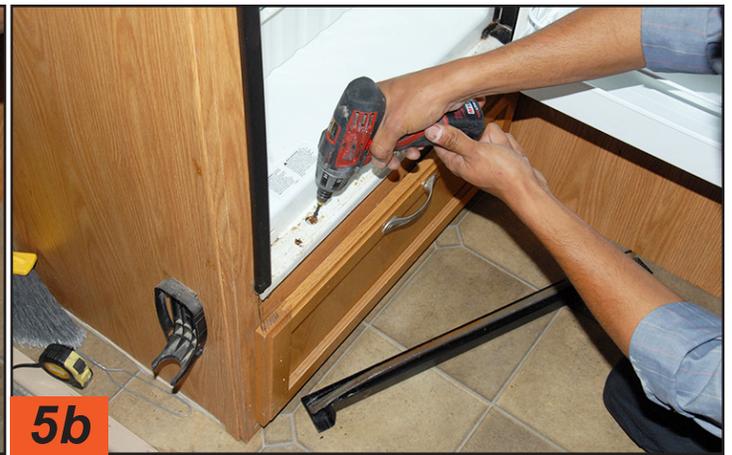


To begin the refrigerator removal, first turn off the LP-gas tank valve inside the access panel, then burn off the remaining LP-gas in the lines by operating the stove top. The LP-gas line can then be disconnected from the refrigerator through the access panel on the sidewall.

A few screws secure the refrigerator housing to the cabinet floor. Clearance was tight in this application, so the technician used a ratchet with a screw bit attachment to remove them.



Unplug the 120-volt AC power cord and remove 12-volt DC leads and your work here is done.



5a

5b

Inside the RV, remove all trim pieces from both the outside of the refrigerator and inside the door. There may be more screws underneath the doorway trim piece (as was the case here), so be sure not to overlook these. Be careful not to pull on the refrigerator until you are sure all screws/hold-downs are removed.



6



7a



7b

Carefully wiggle the refrigerator top-to-bottom and side-to-side to work it free; then you can begin to pull it out.

Here's a useful tip: Once you get the refrigerator loose, go back outside and make sure that the wiring harness is not getting hung up on any part of the refrigerator. Use a flashlight and follow the harness up into the cabinet. This one wasn't tangled on anything, so we continued with the removal. If the refrigerator seems "stuck," have a helper push from the outside.



8



9a



9b

Realizing that the doors could open as the refrigerator was turned on its side, the decision was made to remove them as well. This also made it easier (and lighter) to grip the refrigerator as it was moved through the window opening.

The window opening is lined with a vinyl tarp to protect it, then two technicians (one inside) carefully lifted the refrigerator through the window opening. The second tech then stepped out to help lower the refrigerator to the ground. The new refrigerator goes in the same way as the old one came out.

Window Shopping

If you've never been inside an RV assembly plant, you should — many manufacturers offer tours, and they provide owners with insight as to how their RV is built. For example, it's not unusual for major appliances to be installed long before the exterior sidewalls are in place. That makes it easier to manufacture the unit — but can make it difficult when replacing large items like the refrigerator.

The problem is simple: the original refrigerator and/or its replacement may simply be too wide to pass through the entry door of the RV (even with the refrigerator doors removed). This is even more common with motorhomes — especially Class C coaches, which tend to have narrower entryways than travel trailers or fifth wheels.

In this instance, the refrigerator was 24 inches wide — but the coach



entryway was only 22.5 inches wide. Before you say “not gonna happen,” remember that the typical RV provides plenty of interior light courtesy of an array of windows. Yup — your new purchase may have to be installed through a window opening in your RV. To replace the refrigerator

in this Class C, technicians had to remove a large side window, which isn't as difficult as it may sound. Here's how to manage it; for even more information, check out “Glass Panes” in the September 2020 issue of rventhusiast.com.



1

After measuring the window cavity to ensure it can be used, the first step is to get everything else out of the way. The lambrequin is removed first, followed by the pleated shades (if your RV is so equipped).



2

Next, the screws that secure the window flange to the wall are removed. The putty will usually hold the window in place once all the screws are out, but it's a good idea to have a friend stand outside to hold it, just in case.



3a



3b

Grab the edges of the exterior flange, and the window should come out. If the putty is baked on, it may require a little encouragement in the form of a putty knife to break the window free — just be sure not to damage the gelcoat/paint. Remove the interior window flange and put it in a safe place where it won't get stepped on or bent.



4a



4b

When replacing the window, first scrape off the old adhesive with a razor blade; the putty inside the window frame is removed carefully with a screwdriver. This putty was still soft; older motorhomes, or those that bake in the sun, may require more effort to get the putty cleaned out.



5

Butyl putty tape is applied around the entire perimeter of the window frame and gently pushed into the channel.



6

Once the window is screwed back into place, a putty knife is used to remove the excess putty from the exterior wall. This technician was accustomed to this sort of work, so he felt comfortable using a metal putty knife. However, a plastic one (as well as a plastic razor blade) should be used whenever possible to guard against scratches.



7

The final step is a thin bead of white calking around the top edge of the window to further ensure against water intrusion.



10

Since this refrigerator was an exact replacement, the removal process was simply reversed when installing the new one. The wiring harness and LP-gas line are then reattached.



11

Before the refrigerator is turned on, you can perform a simple leak check by opening the LP-gas tank and using soapy water at the connection (as demonstrated here), but it is recommended

that you take the rig to a qualified RV service center to have an LP-gas pressure drop-down test performed. This will confirm the integrity of the entire LP-gas system and give you extra peace of mind. Qualified service centers will always perform a drop-down test.



12

Once the new refrigerator was screwed into place, the wood trim panels from the old refrigerator were removed and reused on the new one and secured with new trim pieces supplied with the unit.



13

The new refrigerator is a perfect match for the original — and is ready for another decade (or more) of service. **RVE**

Sources:

C & S RV Center
805-982-9900
candsrv.com

Norcold
800-543-1219
norcold.com

RV

ENTHUSIAST

NORTH AMERICA'S PREMIER HOW-TO RV RESOURCE

*Created by – and for – hands-on
RV enthusiasts!*

RV Enthusiast magazine was developed to take the mystery out of RV maintenance, repairs and upgrades, as well as providing how-to tips to make RVing better. We get it: Things happen as time and untold miles of bad roads will take their toll on your RV. But we also know that you don't have to be a mechanic to be able to confidently deal with problems that may crop up. All you really need is truly accurate information you can rely on — fully illustrated every step of the way and written in a friendly, conversational manner you can understand.

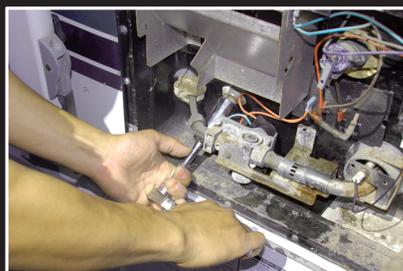
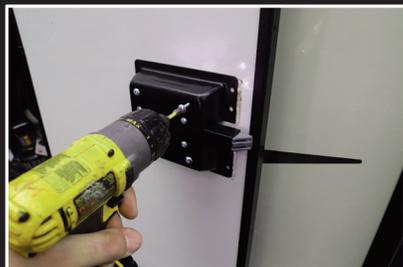
As this issue shows, each monthly edition of *RV Enthusiast* will be filled cover-to-cover with the kind of information and instruction you need to

continue to enjoy your RV for years to come. In fact, there are nearly 50 pages of 'how-to' stories in this issue — just imagine the wealth of topics to be covered and the knowledge gained in a year's time!

If you like what you see, don't miss an issue. It's less than \$1 a month! Go to our website — www.rventhusiast.com — click the "subscribe" icon risk-free and simply follow the prompts.

Coming in the February issue:

Solar power is perhaps the hottest trend in RVing right now — and RV Enthusiast editors spoke with some of the biggest providers and installers in the industry for their thoughts on what's needed to be comfortable when "off the grid." Plus, the February issue includes an array of "half-day" projects you can complete in just a few hours' time to improve livability in your RV, how to replace the fabric on slide-out toppers — and a lot more. Available February 12.



continued from page 12

DRV Luxury Suites, Cruiser RV Launch Mobile Consumer App

Luxury fifth-wheel and toy hauler manufacturer DRV Luxury Suites and Cruiser RV, its sister company at Thor Industries, have launched brand-specific mobile apps that help customers oversee their RVs.

Known as MyDRV (drvsuites.com/mydrv/) and MyCruiserRV, the apps allow the customer to enter their VIN and monitor warranty information, sales and parts orders, as well as maintenance tips. MyDRV provides a growing library of how-to content, checklists, and provides instruction on vital operational and maintenance tasks. Owners' manuals and warranty information also



are readily accessible on the app, along with a dealer directory. Based on the customer preferences, they can opt in for push notifications, which will alert them of their parts shipping, or when

their warranty claim has been processed. To download the apps, visit the Apple app store or Google Play store online.

Four Lippert Products Recognized at 2021 SEMA Show



LUPERNE Impact shock-absorbing rear bumper step.

In just its first year participating at the SEMA Show in Las Vegas late last year, Lippert — the parent company of Curt Manufacturing LLC, the owner of the LUPERNE brand — won four awards at the event, including two New Product awards and two Global Media awards.

Several Lippert brands were featured at the show, including ARIES, LUPERNE, CURT, Ranch Hand and UWS. A LUPERNE product and three CURT products were the recipients of the awards.

The LUPERNE Impact shock-absorbing rear bumper step and CURT GM Multi-Pro/Multi-Flex Tailgate Saver were two of the winners of the 2021 New Product award. More than 1,300 products were submitted, and CURT and LUPERNE earned two of the winning spots.

The Impact bumper features a reinforced heavy-wall steel tube construction that provides superior protection by absorbing rear impact up to 5 mph,

while the GM Multi-Pro/Multi-Flex Tailgate Saver is designed to save Chevrolet/GMC truck tailgates from costly damage by working in sync with the trucks' electronics to prevent the tailgate from

folding down and being damaged by the hitch accessory. Both products are engineered to take innovative steps forward in tailgate and rear bumper step technology.

Meanwhile, CURT's QuickPin Coupler and Universal Tri-Ball Coupler

Lock were the recipients of two of the 2021 Global Media awards, which were selected through the votes of a panel of international journalists. The QuickPin Coupler features an innovative design that allows for quick coupling with just one ½-inch hitch pin. It was engineered to operate without a latch to make trailer hookup as simple as possible, so coupling the trailer is as easy as dropping the trailer A-frame onto the ball and sliding in the pin, ultimately saving time and avoiding hassle. The Universal Tri-Ball Coupler Lock is highly theft- and tamper-resistant. It inserts into the coupler and secures the latch with a lasso lock, and its simple design keeps all components together to avoid any lost pieces. **RVE**

Advertiser Index

(click on company name to view its ad)

Advertiser	Website	Page
Brazel's RV/Ultra RV Products	urvp.com	10
Heartland RV	heartlandrvs.com	7
Hensley Mfg.	hensleymfg.com	10
Hopkins Mfg.	hopkinsmfg.com	15
Lance Camper Mfg.	lancecamper.com	2
LiquidSpring	liquidspring.com	5
REV RV Group – Parts	parts.revgroup.com	26
REV RV Group – Service	revrvserviceandrepair.com	11
Roadmaster	roadmasterinc.com	9
Theftord	thetford.com	68
Tim's RV	timsvinc.com	20
Truma Corp.	truma.net	13

Reliving Ancient History

A tour through Northwestern British Columbia, Canada, will bring you back in time when the Aboriginal culture ruled this vast and beautiful region.



This re-created Gitksan village will take visitors through three longhouses providing an insight into traditional village life.

Kitwanga is a historical village and living museum of the Gitksan indigenous people on the Skeena River in Northwestern British Columbia, Canada. Many consider this area to be one of the best places in B.C. to learn about the Aboriginal culture that has existed here for more than 8,000 years. Additionally, the many parks in the area offer scenic hiking and fishing that showcase the beauty of the region.

Kitwanga means “place of rabbits” and is located within the Gitwangak Indian Reserve No. 1. This tour takes you to the starting point of the Steward Cassiar Highway at the junction of Highways 16 and 37.

The Kitwanga Fort is associated with the 18th century aboriginal warrior, Chief Nekt, who strategically located a fort atop Ta’awdzep, or Battle Hill — the location of battles between local First Nations clans more than two centuries ago. This hill is a large grassy knoll in an otherwise flat space and had a vantage point over the Kitwanga River Valley. A village was established within

the fort, which was occupied until the early 19th century.

The Kitwanga River flowed past this grassy knoll, making it an important oolichan (or eulachon) trade route. Oolichan oil is the grease from small fish and was an excellent source of food that also had a reputation as a healing aid. This oil was traded between indigenous people for furs, copper and obsidian, among other things, developing trade trails between tribes. Kitwanga’s fort was defended by Nekt, who wore a grizzly bear hide for protection against enemy weapons. Nekt was an aggressive warrior who led many raids against neighboring tribes to capture slaves, food stores and other precious gifts.

The fort itself was impenetrable because of its strategic location on top of a hill, and the inhabitants would roll things such as rocks and huge logs covered with spikes down the sides of the slopes during raids to fend off enemies. Chief Nekt was eventually killed during one of his raids, but is still remembered as a great leader. The fort was never lost during battle; however,

it burned down in 1835. The inhabitants of the fort moved to the present-day village of Gitwangak, where its Battle Hill National Historic Site of Canada is one of the first national historic sites for a First Nations settlement, and a few years later began erecting totem poles as potlatches in the village. A potlatch was a ceremonial event accompanied by great gifts to reaffirm one’s social status in the village. Totem poles erect-



Gitwangak Battle Hill National Historic Site, formerly Kitwanga Fort National Historic Site, is one of the early First Nations settlements in Canada. Shown here is Battle Hill, where a hill-fort was built by the Gitksan people in the mid-17th century.



Some of the oldest totem poles in British Columbia can be found in the village of Kitwanga. Totem poles are spiritually significant to First Nations people in Canada, as they serve as signboards, genealogical records and memorials to the ancients.

ed as potlatches in Gitwanga were a reaffirmation of family or clan and each pole tells a story about the clan. The totem poles also represented the human connection with the supernatural world.

The majestic totem poles of Gitwanga Village were erected between 1840-1842, the oldest collection to be found anywhere in British Columbia. Today, the totem poles appear worn and weathered and perhaps in disrepair, but the indigenous people believe they are simply showing their age and will eventually go back to the earth.

In 1882, a church was erected in Kitwanga as a mission station of the North Pacific Mission, which was part of the Church Missionary Society. St. Paul's Anglican Church was erected on this Indian Reserve, along with a free-standing three-story wooden bell tower. A set of 10 wooden totem poles were placed

alongside the church to honor the Gitksan ancients. The establishment of an Anglican Church here was a contrast of cultures — a shift from tradition to that of Christian influence. The church and bell tower still stand today and the stained-glass windows inside the church are intact and quite beautiful to see.

'Ksan Historical Village and Museum in Hazelton, located approximately 25 miles from Kitwanga, is a short trip up Highway 16, at the junction of the Skeena and Bulkley rivers. This historical village is a premier showcase of Aboriginal culture and is a must-see. Guided tours, costing \$15 per person, will take you through the village and into three longhouses, where different artifacts, instruments and

art from the Gitksan culture are on display. This re-constructed Gitksan village gives visitors an insight into traditional village life of the Gitksan nation in the late 18th century, and you will learn about the culture and traditions of these indigenous people through hands-on experiences you won't forget.

A variety of outdoor recreational activities are available in northwestern British Columbia, year-round. Hiking opportunities abound in this part of the territory, including a stop at Kitwanga Mountain Provincial Park. To reach this park, you will travel from Highway 16 onto Highway 37 at Kitwanga. After crossing the Skeena River, you can follow the signs to reach this provincial park. The Kitwanga Mountain Trail (previously known as the Bernadine Trail), has recently been rebuilt and offers great hiking opportunities that



The original stained-glass windows inside this Anglican Church show the Christian influences brought to the Gitwanga Indian Reserve near the end of the 19th century.

reach vantage points to view the Seven Sisters Peaks as well as views of the entire Skeena Valley. Wildlife viewing is also popular in this provincial park and you may be lucky enough to view (from a safe distance) grizzly bears, moose or some of the many bird species that live here.

If you enjoy recreational fishing, the



This three-story wooden bell tower stands in front of St. Paul's Anglican Church. The wood panels and design set the tower apart from its surroundings.



'Ksan Historical Village and Museum in Hazelton is a premier showcase of Aboriginal culture and is a "must-see."



A Gitksan longhouse displays authentic aboriginal artwork. A totem pole in the center serves as a memorial to the ancients. Aboriginal artwork can be found painted on the fronts of buildings throughout the Gitksan Village in Kitwanga.

Skeena River is "where to be" for a chance to catch a world record Chinook salmon. The Skeena River has long been referred to as the "river of mists," and is the second-largest river system in the province. The Gitksan indigenous people from this area were named after this river; "Git" means "people of" and "xsan" refers to the river of mists. The "people of the mists" have fished these waters for thousands of years, as it was an important oolichan trade route. Today, fly-fishing, spinning and float fishing are all popular sports in the Skeena Valley where countless rivers flow with an abundance of Pacific salmon, trout and steelhead; four seasons of fishing are offered.

You may want to spend several days in the Kitwanga area, given the many historical sites to visit and numerous outdoor recreational opportunities. The Cassiar Mountain RV Park in Kitwanga (250-849-5799 or reserve a site on-line at www.cassiarrv.ca) offers full hook-up, pull-thru RV sites for \$42 per night. Seeley Lake Provincial Park in South Hazelton also has RV sites available on a first-come, first-serve basis. No reservations are available for the 20 pull-through sites in this provincial park, and the cost for seniors is \$10 per night. The Hazelton Mountains provide a beautiful backdrop for this park and it's not only a great place to camp, but Seeley Lake offers swimming from its small sandy beach, and kayaking and canoeing, as well. Go to www.bcparks.ca for more information. One other RV Park in South Hazelton (approximately 25 miles from Kitwanga) is Cataline Motel & RV Park. This privately-owned RV park (call 250-842-5271 or reserve on-line at www.catalinemotelcamping.com) offers full hook-up sites with 30-amp electric for approximately \$20 per

night (price varies depending on the number of people per site).

The Skeena Valley has historical sites that have stood for thousands of years and showcase the aboriginal culture and traditions that continue to

be followed by indigenous people that continue to call this region home. Take your time traveling through northwestern British Columbia and you'll sure to log new views of these First Nations people. **RVE**



Gitksan totem poles line the 'Ksan Historical Village. These totem poles have stood for more than 180 years and represent the oldest collection anywhere in B.C. Carved masks and other artifacts are on display at the 'Ksan Historical Village and Museum.



Recreational fishing is a popular sport in the Skeena Valley. This cement sculpture depicts the abundance of Pacific salmon that inhabit these rivers.

Suzanne Strauss



Suzanne Strauss and her husband, **Rich**, have been full-time RVers for about four years.

They started out camping on weekends in a pup tent; eventually, they bought a small single-axle travel trailer to "test the waters" and fell in love with RVing. Now living full-time in a motorhome, they ply the roadways in search of interesting and "off the beaten path" places. She can be reached at: RStrauss22@gmail.com



TITAN[®] TOTE

Premium Portable Waste Tank

The simplest and most durable tote on the market



TITAN[®] TOTE 4-WHEEL MODELS

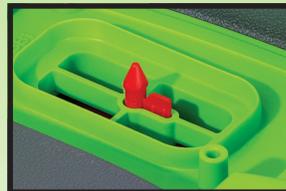
21 Gallon | 27 Gallon | 35 Gallon

TITAN[®] TOTE 2-WHEEL MODELS

21 Gallon | 27 Gallon | 35 Gallon

UNIQUE FEATURES:

- Handles on all sides
- Integrated Titan[®] sewer hose
- Industry's lowest fill height, easier to connect to the RV
- Built in ladder hook
- 90° elbow valve, optional accessory on the 2-wheel models



thetford.com

THETFORD