

The Ins and Outs of Slideouts

These expandable rooms must be maintained.

by Dan Romanko

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Most travel trailers, fifth wheels and motorhomes come equipped with at least one slideout and three slides are commonplace. Some units sport as many as five expandable rooms.

The recent dealer show in Louisville featured a unit in which the whole side of the RV moved out. As popular as slideouts are, not too many RVers understand how these moveable rooms affect the unit as a whole, how they work or how to maintain them.

Slideouts were first used in park model trailers and were called tip-outs because initially they were non-powered and you literally tipped or pushed them out. Newmar was the first major RV manufacturer to incorporate a powered slideout in its line of motorhomes and fifth wheels. A few years ago, Newmar also developed the first flat floor slideout (where the floor of the slide, when fully extended, drops down flush with the floor of the RV) that now is the standard for the industry.

Twelve-volt coach or house DC power is the energy source for all RV slideout mechanisms of which there are three main types: hydraulic, rack and pinion and cable.

Cable systems are usually found on smaller, lighter slides and consist of a cable wound in and out over a series of pulleys that extends and retracts the slide on its tracks. Such systems are usually found in bedroom slides and smaller, lighter units. Hydraulic systems essentially utilize hydraulic rams to extend and re-tract the slide. The rams are driven by an electric pump that pressurizes the oil in the rams, backwards or forwards, to move the slide accordingly. Units with rack and pinion mechanisms are basically gear-driven in that there's a gear or pinwheel on the drive shaft that meshes with matching gears or holes on the slideout arms, thus pushing the slide out or in. All of these types work reasonably well and if I had to choose, I'd pick the gear-driven for the solid contact that gears provide.

Each of these setups should have a manual override (usually a hand crank) in case of power failure as well as a method to adjust the travel of each arm. It's critical that in two-arm setups, each arm moves the same distance at the same speed. The system should move the slide in and out squarely so that at each end of travel, the slide firmly contacts the gaskets all around the opening to ensure a proper seal. The opening in the RV wall for the slide should also have extra frame bracing above (like a lintel in a house) and at the sides providing extra frame rigidity to compensate for the hole in the wall. The more holes cut in the walls of the unit, (i.e. the more slides) the more the frame integrity could be jeopardized in the long term. And the beefier those arms are that extend out with the slide, the better. Features such as these help keep the slide square, straight and working smoothly during the life of the unit. For as soon as that opening, that the slide moves in and out of, becomes off square (twists), then the slide itself will begin to parallelogram and bind in its tracks.

One of the most important features in a slideout system is the gasket that surrounds the exterior of the room and the opening in the wall of the RV. These rubber gaskets seal the interior of the RV from outside air, dust and rain when the slide is retracted and extended.

The gasket system should also have either a separate or integral wiping capability on all sides, including the roof, to wipe water and other debris off the slide as it's being retracted. For the life of me, I can't understand why many RVs today come equipped with or are ordered with slideout toppers — awning-like covers that roll out as the slide extends to cover the roof of the slide. I suppose the rationale is to keep debris and water off the roof as the slide is retracted so that nothing is brought into the RV. We've had slideouts without the toppers on our last two units and during the past 12 years have never had a problem with water or debris coming in the unit from the slides. Too many times I have noticed people with slideout toppers having to manually spill the large pool of water that has gathered in the topper after a rain. In my opinion, well maintained, proper gaskets eliminate the need for these toppers.

Yes, the gaskets must be maintained. Weathering and UV damage make rubber stiffer, more brittle and susceptible to cracking. The rubber gaskets should be periodically wiped down and treated with a dressing that contains no petroleum distillates. I use plain ordinary silicon spray at least twice a year. After five years or so, even with regular maintenance, the gaskets may have to be replaced to continue to provide good sealing capability. As far as other maintenance on your slides, little is required except perhaps some dry lubricant on the extension arms. Once again, don't use oil-based products to which dust and road grime will adhere.

RV slides are engineered and manufactured to require no additional support when extended. They will neither fall out nor sag and are based on the cantilever principle.

Those adjustable slideout supports that install under the slide available in the aftermarket are not necessary and not recommended. Each time they are installed under the slide, they may be at a different level, which may alter the normal travel pattern of the slide causing it eventually to bind.

Every slide can add up to 500 pounds to the weight of the RV. Three slides could mean an extra 1,500 pounds of weight. Many manufacturers list the weights of their units with standard equipment only. In many instances, slideouts are considered optional equipment and thus not included in their weight figures, which could result in your RV becoming easily overloaded. Another factor to consider when first looking at RVs on display is that all the slides are usually fully extended. The interior of your prospective purchase is much different with all the slides retracted. The microwave may be covered. The TV behind a slide. The bed filling the whole bedroom and blocking access to drawers and closets. With opposing slides fully retracted, access to the stove, sink or even the fridge may be difficult. This could be a problem when stopping for a quick roadside lunch or when parked where there is little room to extend slides. Ask to see the interior of the unit with the slides moved in.

Some rules for slideouts: Never move the RV with any slide extended. Engage all stabilizers, jacks and level the unit before extending the slides. It's a good idea to have your partner outside and monitoring each slide as it is being extended. High slides such as bedrooms on fifth wheels may have sharp bottom corners very easy to bang a head against. Some RVers attach orange surveyors ribbon to mark each corner or cover the corners with kids swimming noodles. Some slides come equipped with mechanical locking arms that hold the slide in place in case of accident. Others supply braces that must be installed when the slide is retracted to prevent pop out. Yet others claim when the slide is retracted, the motor automatically locks the slide unit in place and nothing else is required. Unless the slides have locking arms, I suggest the use of the braces.

Slideouts certainly add to the comfort and liveability of our RVs. Sometimes they give grief by not closing properly, binding as they travel in or out and leaking. With a little care and attention these problems can be mostly avoided and your slides will provide long and trouble-free service.

Dan Romanko and his wife, navigator Bobbie, are seasoned RVers. The two travel extensively in their fifth wheel. For more information about Dan's Safe RVing Courses, visit www.explore-canadacaravans.com. Dan can be contacted by e-mail at dromanko@storm.ca or by telephone at (613)489-2132. See From The Navigator's Seat for his mailing address.