

# Help for Backing into a Tight Spot

## TECH TIPS



By Russ and Tiña De Maris

If you've ever dealt with that gnawing, frustrating sense of doom that comes when you've tried and tried, but you just can't seem to maneuver that blasted trailer back into that narrow little slot, you're not alone. We can't tell you how many times we've had to do a "missed approach" move when trying to back our trailer off a narrow little street into a tight spot, right next to a building we don't want to hit. For the Mrs., it often boils down to putting her hands over her ears and going somewhere else, while the chief pilot sweats bullets trying to get the beast back in its assigned parking spot.

Maybe you've got a top-notch restored trailer, and you're fearful that somehow, in backing that pristine rig into the spot, you'll miss a blind spot, and "bango!" mess up that once-pristine finish. You may be a candidate for some of the latest trailer technology that's hit the U.S.: Power Trailer Movers by Purple Line.

So what are trailer movers, you ask? Imagine being able to move your trailer effortlessly, at the push of a button, all without having it hitched up to your tow vehicle. Purple Line trailer movers do just that. Depending on the weight of your unit, a pair or two pair of electric motors, equipped with cog drives, attach to the frame of your rig, and when in use, are snugged up to the trailer's tires. A remote control pad allows you to move the trailer forward or backward, and turn left or right. Got a bit of grade to push the trailer up or down? No worries! A set of four E-go trailer movers will push a trailer scaling in at 7,800 pounds across a level area. Need to push your trailer uphill? A 6,500-pound trailer will march up a 20 percent incline, no sweat.

And don't worry that your trailer could get away and bolt off down the hill like a racehorse. With the control pad button depressed, the unit moves along at a sedate pace. Let loose the button, and the RV will dead stop and hold—the trailer movers acting like a brake, holding it right on the spot. Let's walk through what



A dual-tire nose wheel can support the trailer tongue while the trailer is being moved.

the company offers, and just how the "nuts and bolts" of installation and operation work.

### Choose What You Need

Purple Line's trailer movers come in two "flavors:" The lesser-priced Enduro movers sell for a suggested retail of \$1,299 for one with two motors, or \$2,599 for a four-motor (double axle) setup. Mind you, even a dual-axle trailer can be moved with the two-motor setup. The trailer weight capacity for the two-motor unit is 5,000 pounds and rises to 7,800 pounds with a four-motor system. The same capacities apply to the E-go units, which are priced a little higher—\$1,499 for the two-motor system, and \$2,999 for the four-motor setup.

In view of the price difference but the same weight capacities for the Enduro and E-go models, you might wonder why you'd want to go for the higher-priced system. The difference is in how the drive units come in contact with the trailer tires. The Enduro units simply "lever pull" into the service position; the E-go units need to be cranked into position, either with many turns of a wrench, or quickly with the use of a drill driving a socket. However, on the latter units, you can fine tune just how tight the roller units (the actual drive cogs) are against the tires. That can be helpful: If you're driving the trailer up a steep incline, it can be helpful to put more pressure on the tires; if the tires are a little low on air, you can decrease the "bite" if you will. The E-go unit boasts two other advantages as well. It's all aluminum, hence lighter in weight. It can also be outfitted with an optional electronic engagement system that allows you to push a button to move the rollers into position, forgoing the use of a wrench.

The folks at Purple Line saw to it we got a four-motor E-go unit for our hefty 24-foot trailer, so we'll share our experiences based on that system.

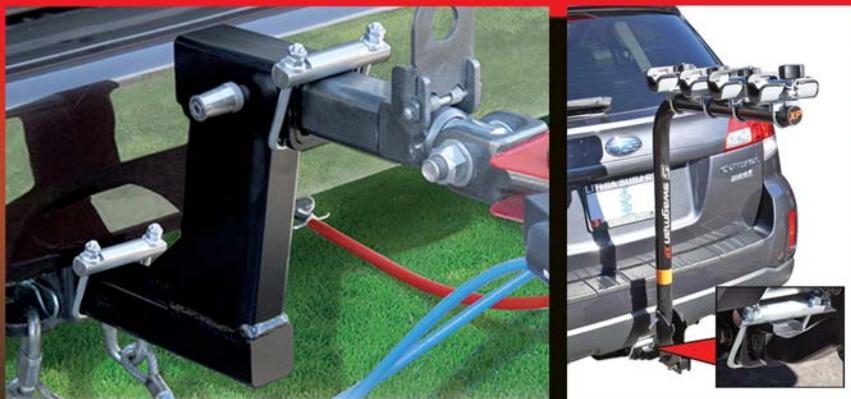
### Nuts and Bolts of Installation

If you're handy with hand-tools and have a few hours available, by all means consider installing these trailer movers on your own. I am by no means a shade-tree mechanic, in fact, my wife always doubles or triples my time estimates for any mechanical job I take on, but I was able to do the installation in a couple of mornings.

Your unit will arrive packed neatly in large cardboard cartons.

## Quiet Hitch™ anti-rattle ring

If towing a car, Quiet Hitch stops free play between the receiver and tow bar eliminating sway and wander of your towed vehicle. Less wander means less tire wear as well as less wear on the hitch and tow bar system. Quiet hitch can also reduce noise and rattle coming from your hitch accessory like a bike rack, ski rack or ball mount.



Perfect for tow bar or hitch accessory applications.

Available for 2", 2 1/2" and 1 1/4" hitch receivers



Time Tested • Time Proven

800-669-9690

www.roadmasterinc.com



Russ and Tifia De...

With the cog drive wheel snugged up tight to the trailer tire, the trailer mover is ready to put your trailer where you want it.

Don't get too eager and yank everything out at once. Take time to sit down and check off the contents against the parts list in the install manual. If you're a pictures-oriented person, good on you. For those of us who get more out of being walked through with a lot of words, take the time to carefully go over the directions a few times before starting out. Mind you, this product originated in the UK, and while the instructions are in English, at times you may be inclined to do a double take at phraseology. "The fixings provided are also suitable..." reads one line. And "tyres" for tires still gives me a snicker.

Included in the "fixings" are all the hardware, parts and wiring that you'll need for a complete installation. Provided you don't lose something, you shouldn't need to sneak off to the hardware store for add-ons. The system is designed to work on your standard box frame chassis most often seen on U.S.-built trailers, but even if yours is an I-beam frame rig, you'll have what's needed for the installation.

It is essential that you follow the instructions provided, particularly with respect to spacing specifications. A 20 millimeter distance between the disengaged drive rollers and the surface of the tire is critical on ALL tires, lest your system take off and start turning, when instead a "straight ahead" command is called for.

You'll first install the physical pieces of the system, which include the motor units and fitments that connect the drive units together underneath the trailer. After you've completed the physical end, as far as I was concerned, the installation of the remote control units and wiring between them and the motor units was a snap.

Here's another caveat: These drive units definitely draw plenty of power. Pushing a 2,500-pound single-axle trailer on flat ground requires 25 amps; "maxing out" the system pulls 76 amps. You will NOT find this system will put up with a typical single 12-volt deep-cycle battery. Our trailer uses six-volt golf cart batteries, with a 210 amp-hour capacity. My 7,000 pounds of trailer can be pushed around my flat gravel driveway, tested to 50 feet or so without problems. In the field we moved around shorter distances, uphill and downhill, but we were glad to have plenty of amp-hour capacity available.

You'll need to mount the control unit (or two units if you do a four-motor system) near the battery location. Ours mounted inside a bathroom cabinet, which was handy, because you'll also be required to blast a hole in the trailer floor to fish wires through. Some folks might not be too keen to have holes in obvious locations, so a cabinet mount is ideal.

Of course, when you put your trailer mover to work, you'll need a wheel in place of a flat plate under your tongue jack. The company is presently working on making one available to customers, but we built our own. A single pneumatic wheel from a marine dealer just didn't cut it, so we obtained two hard 10-inch

# Washington State Evergreen RV Show

October 3, 4, 5, 2014  
Evergreen State Fairgrounds  
Monroe, Washington

(Inside the New Event Center Building)

Friday & Saturday 10am to 7pm  
Sunday 10am to 5pm

**Largest Multi-Dealer RV Show  
in Northern Washington**



**100's of New and Used!**

Adults \$7.00 • Seniors \$6.50 • Kids 16 & Under Free  
**Admission Good All Three Days!**

First 1000, Online Only, Receive Free Admission at  
[www.evergreenfallrvshow.com](http://www.evergreenfallrvshow.com), Courtesy of:

**RV Trader**

[www.rvtrader.com](http://www.rvtrader.com)



[www.evergreenfallrvshow.com](http://www.evergreenfallrvshow.com)



Russ and Tiña De Maris

A socket-driving drill is used to disengage the trailer mover from the tire.

dolly wheels, each with 600-pound capacity. We mounted them, one on each side on the outside of the device, using a 5/8-inch Grade 8 bolt as an axle.

### Put to the Test

The directions call for “fitting the engagement tool onto the Engagement Spindle” on the mover and turning it, watching an indicator line on the cover “to point within the two lines.” Our maiden voyage was to push the trailer out of our gravel lot and onto the street where we’d hitch up to the truck. Getting the hang of just where “within the two lines” was the catch.

We got the trailer out in the street, but when we started to turn the trailer to meet up with the truck, trouble broke out. The rollers spun, while some tires didn’t keep up, and the system, detecting a problem, promptly shut down. Happily, after a bit of head scratching, we determined the torque on the tires just wasn’t quite enough. We tightened the bite, turned the movers back on, and got out of the way—only holding up the local school bus a couple of minutes while we cleared the street.

After a few tries, we finally got the hang of just where our particular trailer “liked” to have the rollers snugged up to the tires. When pushing the rig around in deep gravel, we found having the two steer wheels under the tongue jack was also a superior idea. Backing up is easy in gravel, but going forward on one wheel can

cause problems.

If you have trouble hitching your trailer to your tow vehicle because you just don’t have enough eyes to leave a pair back at the bumper while you steer from the cab of the truck, these trailer movers are slick. Stand at the front of the trailer, push the remove control buttons, and drive the trailer right up to the hitch ball. With the hitch centered over the ball, lower away the tongue jack and you’re set to go.

Maneuverability in tight places has to be the hallmark of the Purple Line system. As mentioned, we have a very tight parking spot. There’s little room for error, and backing in from a narrow street means plenty of stress for the driver. With the power movers, we simply slip the tongue jack caster wheels under the jack; raise the hitch off the ball, and “walk” the trailer right back into its space. The system will cut a close corner, and if it isn’t quite right the first time, it’s a simple matter to push ahead or roll back, swinging the front or the rear of the trailer to pinpoint park the trailer wherever you wish.

### Final Considerations

When we first installed the power movers, we were a bit concerned about the ground clearance. While the movers themselves have fair clearance, two crossbars extend from each motor unit across to its opposite number. These crossbars seemed pretty low to the ground, and it worried us. We shouldn’t have been so concerned. We’ve had no problem with them hitting anything. However, they will prevent you from sliding a shop jack under the rig to make a quick tire change. We’ve had two occasions where we’ve had to change a tire since installing the system. The answer is to move the jack in between the tires, and use the point where the leaf springs meet as a jack point.

All in all, Purple Line Power Trailer Movers may be just the answer for RVers who find getting their trailers into tight places is just too much of a hassle. Visit the company website ([purplelineusa.com](http://purplelineusa.com)) for dealer information, and helpful video presentations on both use and installation. ■

*Russ and Tiña De Maris are authors of RV Boondocking Basics—A Guide to Living Without Hookups, which covers a full range of dry camping topics. Visit [icanrv.com](http://icanrv.com) for more information.*

## Sudoku Puzzle Answers on Page 45

4	3	6				5		
						1		
8					6		4	7
9					5	2		3
	6	7	2		3	4	8	
3		4	7					6
1	4		6					5
		5						
		3				6	9	2

# THE NEW & DYNAMIC RVLife.com

- **Blogs - Daily Articles on:**
  - Full-Timing Nomad by Rene Agredano
  - The 19th Hole by Rick Stedman
  - RV Travel Tales by Arline Chandler
  - The Silver Gypsy by Sharlene Minshall
  - Great Escapes by Denise Seith
  - Adventures in RVing by Dave Helgeson
  - The Healthy Traveler
- **News Updated on a Daily Basis**
- **Expanded Festival & Event Listings!**
- **7 Years of Digital Edition Archives**

And So Much More!

Visit The New RVLife.com