

Roadmaster's new Nighthawk brings a touch of cool to tow bars. The supplier's latest offering builds on its history of product innovation and quality.

By Mike Harbour

ew RV products hit the market at a fast and furious pace these days, yet more often than not, true innovation seems rare. That's why Roadmaster Inc., a company with a more conservative approach to product introduction, made sure its latest tow bar is bringing both style and substance.

The Nighthawk gets style points for being illuminated – an industry first – as well as an eye-popping finish that's also easy to grip. For substance, the tow bar has been built with power cord and safety cable management in mind, plus extreme durability. At a glance, it's an impressive piece of towing equipment, but it also represents decades of intense engineering that began when Jerry Edwards founded Roadmaster in the 1970s.

Back then, finite elemental analysis, or FEA, wasn't used to study such things as tow bars. Edwards made do with pen and paper and came up with what became the StowMaster, based on a patent he purchased in the early 1980s. A few years later, he gave his drawings to an engineer who used FEA to determine issues that the tow bar already had been experiencing in the field. It made Edwards a believer, according to David Robinson, longtime Roadmaster vice president.

"At that point, we invested right around \$250,000 in com-

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Key Roadmaster employees are pictured in front of the company's facilities in Vancouver, Wash. Pictured are (left to right): Chris Huggins, CFO; Ken Milosevich, plant manager; Linda Myers, accounting manager; Jerry Edwards, founder and president; David Robinson, vice president; Robin Robinson, purchasing manager; Eric Jason, national sales manager; Mike Cannon, research and development manager; and Ryan Monroe, engineering manager.

puters and software to be able to crunch the numbers for computerized testing, so we were probably 15 years ahead of most of our competitors," he says. "Today, every tow bar, every bracket kit, and every steel hitch product that we make here goes through that process and it will tell us, through a color scale, where our weak points are."

It's a part of product development that Edwards is proud of, Robinson says, and Roadmaster even devotes a page on its website to FEA so customers can learn more about the process. The company doesn't stop at the computer screen; it also puts each design through real-world fatigue testing that simulates 600,000 miles of pushing and pulling at full capacity.

Customer Input is Key

Another driver in developing new offerings is perhaps less sophisticated, but equally important, and that's old-fashioned feedback.

"Jerry taught me a long time ago listening is a skill. That's one of his favorite catch phrases," Robinson says. "We've gotten just a tremendous amount of good information for product enhancements from customers at rallies and shows."

Roadmaster also gets plenty of feedback through its customer service and technical support staff at the company headquarters in Vancouver, Wash., where 16 employees field about 2,500 calls a week.

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Roadmaster takes pride in making all of its products in the U.S.A. using American-made components whenever possible.

The staff's customer service side handles product-related questions from both retail and wholesale customers via phone, email, fax or even snail mail, according to Robinson, while the technical support side takes care of issues from dealer shop technicians and home do-it-yourselfers.

"If there are problems, tech support is going to hear about it," he says. "If they've heard about it more than one or two times, then they will feed it up the chain and say, 'Hey, I've got an idea ... what if we could do X?'"

Keeping problems to a minimum is part of the motivation behind Roadmaster's thorough installation manuals.

"One of the things we pride ourselves on is the instructions. I think we make probably the easiest, most detailed instructions. We want to make sure it's done right," Robinson says. "To install one of our brackets, if you can just follow the pictures, you can put it on."

That's also why Roadmaster's catalog is 44 pages long; in addition to highlighting its main offerings, the publication also serves as a primer on how to tow a vehicle behind a motorhome. It's perfect for the younger generation of customers, Robinson says, who are less mechanically minded but more research focused than the older crowd.

Lighting Up for Nighthawk

Given that Roadmaster's customer base, like the RV industry itself, caters to young and old, the Nighthawk is certain to please both customers.

"There's always been this dead space between the car and

the motorhome and at nighttime, it looks like there's just a car tailgating the motorhome," Robinson says. "We wanted to – for safety reasons – light that up. Also, when you get to where you're going, if it happens to be dark or night, when you go out there to disconnect, it's nice to have that area illuminated so that you can see to unplug things and disconnect pins and so forth."

Each arm of the Nighthawk contains an LED strip, and the design, created by Robinson, is patent pending.

"It becomes a side marker light and it's amber just like your vehicle side markers would be," Robinson says. "They are activated by the motorhome's taillight circuit, so whenever the motorhome's lighting system is on, then the tow bar's lighting system will be on."

Robinson doesn't hesitate to put it another way: the Night-hawk is a great-looking, and hard-working, product.

"One of the things I've noticed is the older generation just wanted something that worked. The newer generation wants something that looks cool and works. That's really what this is," he says. "It's got something that nobody else has ever done before, but it's also a great tow bar. It's an aluminum model so we've extruded aluminum shapes, that's the outer arm, and in this shape is a channel that the LED strip is routed through so that's what holds the lighting in place."

The Nighthawk also has two other channels built into it so users can route the electrical power cord and the safety cables between the towed vehicle and the motorhome. With the design, Robinson says there's no need to continually wrap cords and

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Roadmaster employs a 180-member production team at its facilities in Vancouver, Wash., and Portland, Ore.

cables around the tow bar to keep them from dragging like other models without such channels.

Another feature the Nighthawk offers can even save customers money.

"If you ever towed a car, one of the things that you'll find out real fast is you want to keep the tow bar level within about 3 inches," he says. "If you get, say, 6 or 8 inches out of level, you'll be fine on flat ground, but now go down a very steep hill or over railroad tracks and all of a sudden when that long overhang on the rear of the motorhome rises up, you could be a foot-and-a-half out of level.

"People purchase – and we manufacture – drop hitches and risers to get you back in that level range, but it also extends the towing assembly out farther from the motorhome. So, if you use straight cables or power cords, sometimes you have to buy longer versions of those," he says.

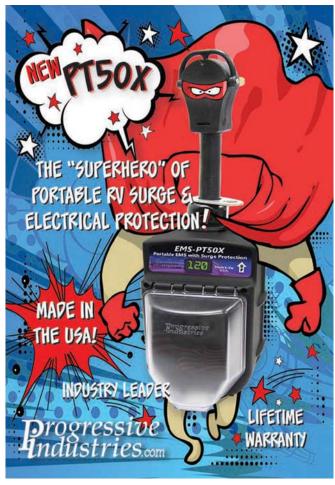
That's why the Nighthawk is equipped with coiled pigtails for both the safety cables and the power cord.

"Even if you do get a 10-inch drop that extends it 10 inches up or down, plus 12 inches out from the rear of the coach, you'll always have enough cable, you'll always have enough power cord and you don't have to buy specialty longer versions," Robinson says.

Solid Construction & Stylish

The heart of any tow bar, of course, is the material and the Nighthawk doesn't disappoint there, either. The outer arms are composed of 6061 aluminum, an aircraft-grade metal, while the inner arms are made of solid stainless steel, according to Robinson.





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Roadmaster is well-known for its tow bars, but the company makes brackets, braking systems, wiring kits and more for towing applications. In fact, the supplier has more than 2,500 SKUs to cover almost every towing situation.

Roadmaster's competitors, he notes, use hollow tubes for inner arms that simply aren't as strong.

The Nighthawk is notable for what it doesn't have, too; there's no quick-disconnect cross bar prevalent with most of Roadmaster's other tow bars. That means the Nighthawk will connect directly to the bracket kit that's on the towed vehicle, according to Robinson, making it easier for the customer to attach and detach.

Dropping the cross bar also saves weight, he says, and it provides a cleaner look to the front of the towed vehicle when it's not attached to the motorhome.

In keeping with Roadmaster's efforts to make the Nighthawk cool, it features a powder-coated black wrinkle finish that's applied in-house.

"It provides texture to the tow bar and it catches the light," Robinson says. "It looks different than anything we've made and it's very attractive, but it also provides some grip when you're holding onto the bar. If you have a flat finish and it gets wet, it can easily slip out of your hands."

It may be a small detail, but Roadmaster, which employs anywhere from 240 to 300 depending on the time of year, is in the business of paying attention to such things. After all, creating a tow bar is only half the battle; the other half is developing brackets for the vast number of cars, trucks and SUVs that serve as towed vehicles.

The process seems straightforward enough: a vehicle is brought to the company's engineering department, a prototype pair of brackets is created based on the mounting points, the brackets get tested, and then, if all goes well, they go into production. Only things are not always that easy, according to Robinson.

Investing in Engineering

Most cars, and even some trucks, built today have unibody construction. The best way to understand that, Robinson says, is to imagine 12 layers of thin sheet metal stacked atop each other underneath the vehicle. That kind of construction makes it difficult to find good areas to attach brackets to, so Roadmaster's team of eight engineers often must draw into the computer, not just the brackets themselves, but the front end of the vehicles, too.

From start to finish, it's a four- to five-week process to create

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Roadmaster handles details of its product development, manufacturing, packaging and warehousing in-house.

a bracket, but since the engineers only have access to a vehicle for three to four days, Robinson says they depend on experience and skill to determine what's required. Once a vehicle is gone and the part fails in the computer, they have to locate another vehicle of the same make and model and start the process again.

"We make well over 1,200 unique bracket kits to fit about 2,800 makes and models of cars going all the way back into the '80s," he says. "It's good for the people in the industry because it's hard to tap into (for overseas competitors that don't have access to U.S. vehicles), but it's bad for us because we may make only 10 or 12 of these brackets a year."

Still, the way Roadmaster looks at it is that it's not just brackets they're selling, Robinson says, but also tow bars, braking systems, wiring kits and other items. The supplier has more than 2,500 SKUs to cover almost every imaginable situation a customer may run into – a huge selling point for a dealer's parts department.

Another one is Edwards' made-in-America philosophy – one he developed years ago when his first group of vendors couldn't

meet demand or provide quality components. Practically everything sold by Roadmaster is made by the company, Robinson says, with the exception of some nuts and bolts.

The company's 180-member strong production team – spread across 200,000 square feet of manufacturing space in three different Vancouver-Portland, Ore.-area factories – cut down 20- to 40-foot lengths of raw steel with nine CNC turning centers. The result: a staggering array of products that are not just tested here, but made here, too.

"He's made the investment to keep the work here and that's very important to Jerry," Robinson says. "There's a number of items that I've brought to him and said, 'You know, we can buy this for a third the price overseas,' and he goes, 'I know, but I want to keep the work here."

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