

Supplemental Comfort



RV Comfort Systems owner Larry McGaugh is pictured at his warehouse in Bothell, Wash. McGaugh used his background in HVAC to develop the CheapHeat, his supplemental electric heaters for RVs. It is available for install at both the OE and aftermarket level.

RV Comfort System's CheapHeat product is designed to allow RVers to reap the benefits of a gas-electric hybrid heating system. The product is available as an OE or aftermarket option.

By K. Schipper

Imagine the poor RVer spending a chilly evening in his fifth wheel during the fall or winter season. Some might put on another layer, while others might simply grumble.

But where others see only a problem, Larry McGaugh saw an opportunity to use his background in HVAC (heating, ventilation and air-conditioning) to develop a solution when he developed a supplemental electric heater for RVs. And, then, being an entrepreneur, he decided to share his idea with the market.

The owner of Bothell, Wash.-based RV Comfort Systems admits it hasn't all been smooth sailing since his CheapHeat System first became available in 2013, but he continues to get the word out that this is a product worth having.

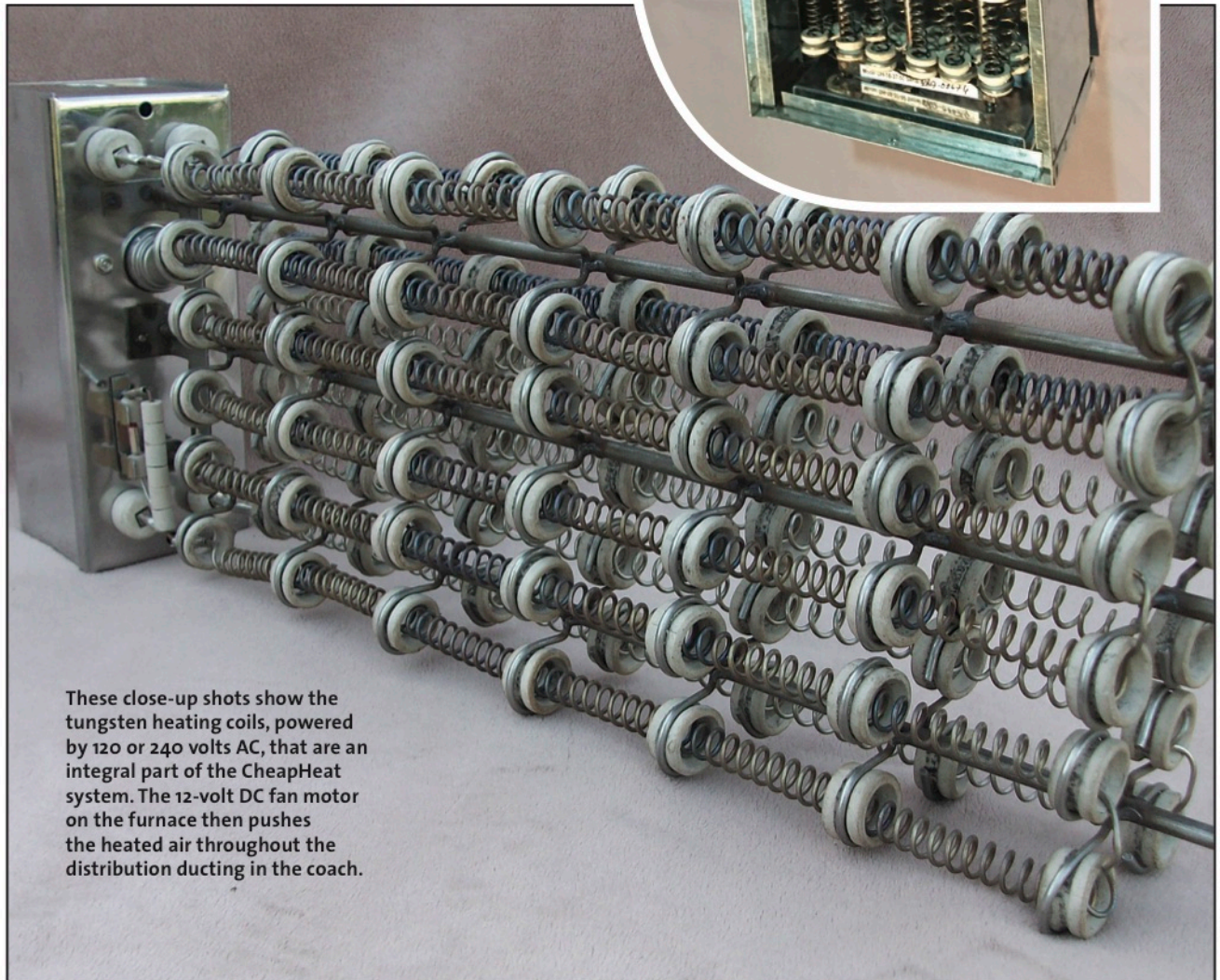
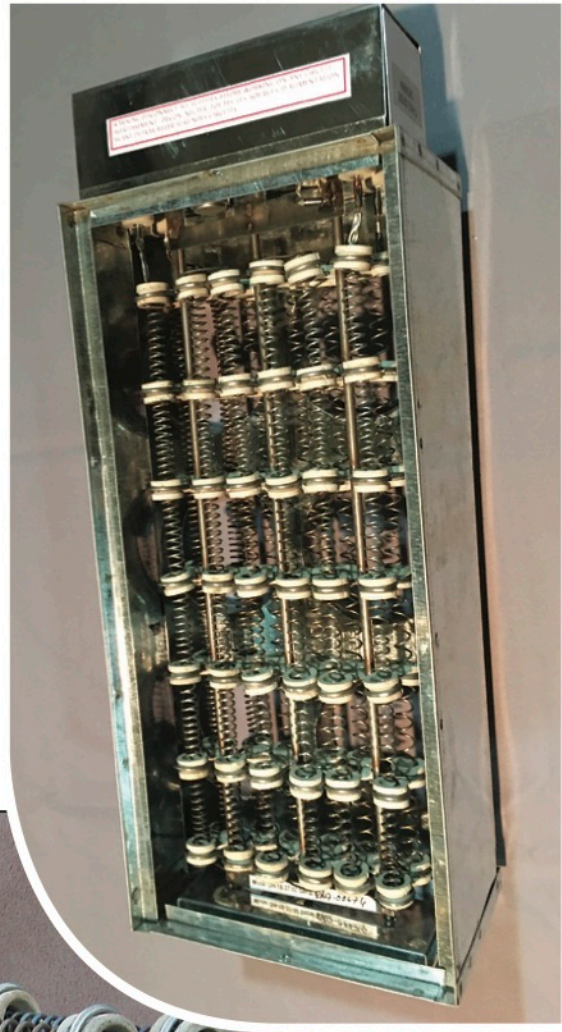
A Strong Background in HVAC

If ever a man seemed almost destined to invent an RV heater, it would have to be McGaugh, an Oregon native and seven-year Navy veteran. After his discharge, he planned to follow his military career in electronics, but lack of a degree kept him from the jobs he wanted.

“I thought, ‘I need to rethink this,’ so I spent a couple years at community college and got an associate’s degree,” he says. “Then, I got into the heating business. I had started from a solar energy concept and moved into the heating business, where I had my own heating company for about 20 years.”

From there, he became a consultant, as he describes it, “fixing broken heating companies.” Working for large heating contractors, he and his wife traveled the United States, spending a year or two in different cities. Originally, the couple bought and sold houses as they relocated, but after that got old, they bought a big fifth wheel.

“Then, I spent a winter back on the East Coast, and it was quite cold back there,” McGaugh recalls. “I was going through propane faster than I could pack the bottles, and I thought, ‘There must be a better way. I’ve been a heating contractor for more than 30 years; I should be smart enough to figure this out.’”



These close-up shots show the tungsten heating coils, powered by 120 or 240 volts AC, that are an integral part of the CheapHeat system. The 12-volt DC fan motor on the furnace then pushes the heated air throughout the distribution ducting in the coach.

After some consideration, he came up with the idea of adding an electric heater coil to his propane furnace. Or, as he says, “I’ve got a gas-electric hot water heater, I’ve got a gas-electric refrigerator and everything else that can run on gas and electric – except my furnace.”

After figuring out a process and developing his hybrid heater, McGaugh says he ran it in his fifth wheel for the next five or six years while he continued working as a consultant. It was only after retiring to Bothell that, at the urging of his wife, he decided to commercialize the idea.

“We created it, we patented it, and we jumped through the hoops to go through the RVIA (RV Industry Association Standards Department) and make sure we were compliant,” he says. “We got it UL-listed, and after going through a couple variations of the design, we started selling it.”

Seeking Inroads in the OEM Market

Sometimes, even producing a better mousetrap isn’t going to lead the world to your door, however. Although McGaugh sees his CheapHeat as a natural upgrade for the OEMs, it hasn’t worked



The CheapHeat System is comprised of a few key components, including the controller box (pictured). The controller ties the CheapHeat system together with the existing wall thermostat and fan.

TRIM-LOK INC.

Same Day Shipping on
Thousands of Parts
CALL US TODAY!

FREE SAMPLES

Test Our Trims and Seals
for Fit and Function

FREE CATALOG

Quickly View Our Most
Popular Lines
of Trims and Seals

DESIGN
ASSISTANCE

Let Us Help you Find
the Right Trim and Seal








IF YOU HAVE AN EDGE... WE HAVE A TRIM! 800-405-2966

HEADQUARTERS

6855 HERMOSA CIRCLE
BUENA PARK, CALIFORNIA 90622

MIDWEST MANUFACTURING

1642 GATEWAY COURT
ELKHART, INDIANA 46514

LOCAL: 714-562-0500
FAX: 714-562-0600

WWW.TRIMLOK.COM
INFO@TRIMLOK.COM

“We’ve never had a warranty problem. Our warranty states that if the furnace manufacturer refuses to honor the warranty, we will pay for the warranty for the furnace. The consumer does have to have something in writing that says the furnace manufacturer is refusing to honor the warranty, but we’ve never seen one of them.”

Larry McGaugh, owner, RV Comfort Systems

out quite that way in the face of opposition from the propane heater manufacturers.

Because of his experience in the heating industry, McGaugh says he was very careful to make sure his design didn’t change or effect any of the listing criteria or certifications with the propane furnaces themselves.

“Fortunately, there are heating ducts that go in after the furnace,” he says. “What we’ve done is create a duct-heater system that doesn’t use any of the controls in the furnace; we created our own controller.”

Although flipping between the two systems is as simple as flipping a switch, he acknowledges that there is a single wire that goes from his system to the blower motor on the propane furnace. The organization that is the certifying agency for gas furnaces has ruled that the wire wouldn’t change the ANSI (American National Standards Institute) listing on the furnace, according to McGaugh, who adds that federal law under the Magnuson Moss Warranty Act states that when a third-party manufacturer adds something to the end of a primary product it doesn’t void the warranty for the primary product.

Go with the PROs.



Chris Cieto
Publisher
(800) 669-0424
x253
ccieto@nbm.com



Ryan Moorhead
Account Executive
(800) 669-0424
x216
ryan@nbm.com



Jordyn Foos
Account Executive
(800) 669-0424
x212
jfoos@nbm.com



Ashley Banks
Sales Support
(800) 669-0424
x215
abanks@nbm.com



Brad Worrell
Editor
(800) 669-0424
x299
brad@nbm.com



Travis O. Pryor
Managing Editor
(800) 669-0424
x284
tpryor@nbm.com



David MacNeal
Digital Content Editor
(800) 669-0424
x230
dmacneal@nbm.com

**WE ARE THE SEVEN PROFESSIONALS
DEDICATED TO THE SUCCESS OF YOUR BUSINESS.**

RV PRO
For The RV Professional

rv-pro.com



“We’ve never had a warranty problem” McGaugh says. “Our warranty states that if the furnace manufacturer refuses to honor the warranty, we will pay for the warranty on the furnace. The customer does have to have something in writing that says the furnace manufacturer is refusing to honor the warranty, but we’ve never seen one of them.”

However, interest from the OEMs to date has been slow. He isn’t giving up the fight, though.

Last year, RV Comfort Systems signed a contract with Twin Lakes RV of LaGrange, Ind., to have it install its system for individual buyers before the new units are delivered to dealerships.

Selling in the aftermarket offers its own challenges, including lack of knowledge of the product.

While the company’s marketing effort has consisted of trade shows, rallies and industry advertising, McGaugh says one problem he faces is getting RVers – and even some in the industry – to understand the technology behind his product. He recommends that CheapHeat heaters be installed by a technician (the installation can take up to eight hours for a novice installer).

Perhaps the biggest issue the product faces in the aftermarket is



With RV Comfort Systems's CheapHeat product, users can easily switch between electric and propane heat.

A SMARTER APPROACH

DELUXE PORTABLE ICE MAKERS

- Produces up to 26 LBS of ice in 24 hours (small or large bullet shaped cubes)
- Faster ice harvesting cycle (as quickly as 7 minutes)
- Front-facing, easy-to-use, LED Display Panel w/ large viewing window
- Built-in Auto Voltage Regulator (90-128 volts)
- Added insulation for superior cooling
- Ergonomic design for use in mobile applications
- Available in a variety of colors: Silver, Red, Black, Blue
- Introducing our new 2018 colors: Green, Purple & Camouflage

WWW.CONTOUREUSA.COM

CONTOURE®

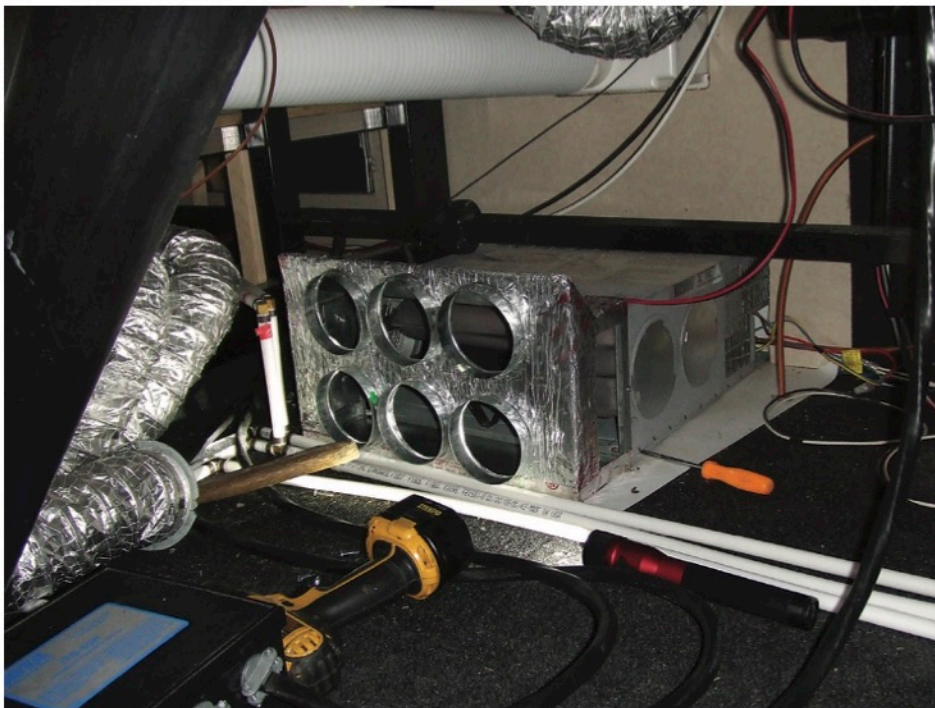
SPACE SAVER APPLIANCES

DELUXE COMPACT ICE MAKERS





Pictured above and below is the housing unit for CheapHeat's coils. The CheapHeat system can be configured to provide three different wattage ratings – 1,800 watts, 3,750 watts and 5,000 watts – depending upon shore power cord limitations.



its physical size. As an OEM product, units could be designed around it, but for retrofits the heater requires a minimum of 6 inches after the furnace.

“That might not sound like much, but what we’ve found is where the furnace is in the basement area we usually have the room,” McGaugh says. “If it’s under a counter and the counter is 24 inches deep and the furnace is 20 inches, the math doesn’t work. If it’s under a refrigerator, sometimes they can throw out the grill and add it.”

Another option is to change out a unit’s propane furnace for an RV Comfort Systems’ Stand-A-Lone all-electric furnace, which has the same footprint as a gas furnace. The company also makes a ductless heater for tent and pick-up trailers.

Something for Everyone

McGaugh is quick to note that the electric heat is a more-even, more-comfortable heat because it doesn’t have the pre-and post-purge cycles of a gas heater, where the fan is running without the burner being ignited.

“Because our systems run on 240 volts, we draw only a little more electricity than two roof air-conditioners, and we can still heat a unit all the way down,” he says. “The challenge with the aftermarket is getting them to understand that it’s not only do-able, but we can actually heat a coach.”

The company’s most-recent addition – released last October – is testament to that. It’s an add-on that upgrades its heaters to automatically sense whether they’re plugged into 30- or 50-amp power.

“When you’re on a 50-amp service, the heater will run on the high-heat setting,” he explains. “If you take your RV home and pull up outside your house and plug it in, the system automatically knows you’re not plugged into a 50-amp service and will shift the heating down to our lowest heater setting, so it will run on 120 volts.”

Running the heater on 30 amps certainly won’t keep a 40-footer at 72 degrees, he says, but it will provide a level of heat sufficient to keep the unit from freezing, without the danger of leaving a portable heater plugged in and running.

Perhaps not surprisingly, one group that has expressed interest in CheapHeat is park owners.

“They don’t want people using plug-in electric heaters because they’re unsafe,” says McGaugh, adding, “Our system is designed with redundant safeties in it, including an automatic reset switch and a fail-safe device called a fusible link.”

Not only that, but he stresses his commitment to putting out a quality product. For instance, each heater is in a metal box, rather than plastic.

McGaugh notes, too, that when dealers have begun offering his products, many of them find they sell more units because more people are living full-time in their units than ever before and want the additional heat.

At present, he says his strongest markets are Texas and the East Coast, including Florida.

“A lot of those people are snow birds, and they’re living there during the winter, but going back north in the spring or heading south in the fall when they’re still using their heating systems,” he says.

McGaugh is almost always available to answer questions about his product. Call the company and you’ll get him because, “I like to be the guy who answers the phone. In a lot of situations, if there’s a question, having been the designer, I can provide the technical support and the answers.”

The company website also offers a host of videos on the product after McGaugh realized many people weren’t reading the FAQ (frequently asked questions) section.

The bottom line for McGaugh right now, he says, is getting the word out about his CheapHeat System.

“We need to tell people that it’s out there and it works well,” he says. “I’ve been told by several of our customers they won’t buy another RV without one.” **PRO**

REPLACEMENT COOLING UNITS

6-YEAR WARRANTY

Now Available:
Next-Day Delivery
through Meyer
Distributing



MORE INFO: 260-768-7990
www.pinesrvrefrigeration.com

#1 question we hear at RV shows across the country.
Why don't they do this at the manufacturer?



Since 2005 we have been removing RVer's roof problems.
FlexArmor™ provides the revolutionary RV Roof the
RV community has needed for years..



- *Cost is less than traditional RV roofs
- *Lifetime NO LEAK Guarantee
- *Any style RV, Any roof type



Become an authorized applicator of
the only RV exclusive sprayed roof system.

Visit our website:

RVRoof.com

Or Call 904-814-2104
For a dealer package.

