



PHOTO BY TODD COOPER

Mark Murphy and his dog Emily

Call of the BugE

MARK MURPHY RESURRECTS THE ELECTRIC CAR

BY NICOLE FANCHER

It squats like a space pod or Cyclopsian insect-robot, its one tinted bug-eye glinting in the late afternoon sun. Suddenly, the eye raises its lid, and from its depths emerges ... a man wearing a midnight blue, wool engineer's cap and a dark knit sweater. After a warm greeting and firm handshake, Mark Murphy turns, arms folded across his chest, to admire his creation: the BugE — a one-seater "neighborhood electric vehicle" designed for around-town, everyday driving needs.

Murphy's BugE is both a battle cry against human-caused global heating and a practical design for affordable and efficient personal urban transportation. Driving a clean, electric vehicle could help break the shackles of oil dependency, Murphy believes. In just 30 years, he says, the U.S. has gone from being the world's largest oil exporter to importing nearly \$50 billion worth of oil each year. And many energy experts believe that since the Earth has passed "peak oil" — where oil demand can no longer meet a dwindling supply — finding an alternative is no longer an option; it's an imperative. Murphy believes his BugE is one step towards a solution. "It gives people a choice that isn't a car," he says.

In his driveway, Murphy commences his show-and-tell of the vehicle's features such as the aforementioned "eye," a tinted, aerodynamic fairing that shields against wind, rain and toxic exhaust from idling SUVs. The BugE's white fiberglass body stretches out, semi-enclosed, like a reverse recumbent tri-cycle without pedals; it has two front wheels

and one back. This configuration ensures that "all the stability is in the direction you're going," says Murphy, plus it ensures that the BugE can obtain motorcycle licensing as a three-wheeled vehicle. The BugE has flat handlebars complete with hand throttle and brakes; aluminum mag wheels; rearview mirrors; a front storage compartment; and an adjustable seat. Murphy's design is simple: It has only 75 part numbers and weighs 385 pounds. It has to be simple. After all, the entire vehicle is a build-it-yourself kit.

Murphy says he specifically designed the BugE kit for easy assembly. No building experience is required. Owners can build BugEs at their own pace and as their budget allows. At the same time, they will learn how their vehicle operates. Murphy adds that BugE purchases also support local businesses. "Three-quarters of this is made right here," he says: A fiberglasser in Goshen makes the body and frame, ProCycle in Springfield makes the turn signals and street-legal halogen headlights, and all basic tools and supplies — nuts,

bolts and the lead acid batteries — can be purchased at local hardware and automotive shops. A few main components are made out of state: The 48-volt motor and battery charger come from Washington, the canopy comes from California and the wheels and tires come from North Carolina.

Murphy envisions the BugE as a product combining economic practicality and environmental responsibility. On the one hand, the car is inexpensive to buy and power: The kit costs around \$5,000, and juicing it up costs about 1 cent per mile. The power cord, stored in the front storage compartment, can plug into any standard 110-volt outlet (found at home and pretty much anywhere else around town: outside grocery and convenience stores and, of course, at gas stations).

A BugE completely sapped of juice might take overnight to recharge. But Murphy's idea is for people to charge up as they go, so the BugE will always be topped off. Fully charged, the BugE can run for approximately 20 miles at 40 mph, 30 miles at 30 mph, or 40 miles at 20 mph — more than enough power to make several 5-mile trips to and from the grocery store.

The BugE aims to suit the needs of many people, from Baby Boomers who seek more comfortable transportation to those who simply don't want to battle cold, stinging rain biking to Safeway. But more than anything, driving a BugE makes practical sense. According to Murphy, more than three quarters of daily vehicle trips are driven by one

person less than 30 miles. Instead of driving alone in the Explorer to the video store a couple miles away, the BugE, Murphy says, will get you there and back just as fast, and with a cleaner conscience. While some will choose the BugE for economic reasons, Murphy believes, others will buy the BugE as a statement, a bit of good, clean road rage, where they can stick it to the human-made global heating trend and those who deny it.

Some will buy the BugE as a bit of good, clean road rage.

Murphy's clean car dream has been brewing for a long time. This man is no Go-Go-Gadget garage tinkerer — although he does work out of the yellow and white shed at his Creswell home. A graduate of the renowned Art Center College of Design in Pasadena, Calif., Murphy has been a professional industrial designer since 1984. He worked for BMW and also on projects for General Motors and Chrysler. But after 10 years of the Southern California "rat race," Murphy had enough of designing luxury gas-guzzlers and moved to Eugene in 1992. Soon after, Burley Design Cooperative hired him to redesign their 16-year-old bicycle trailer, which he turned into the