

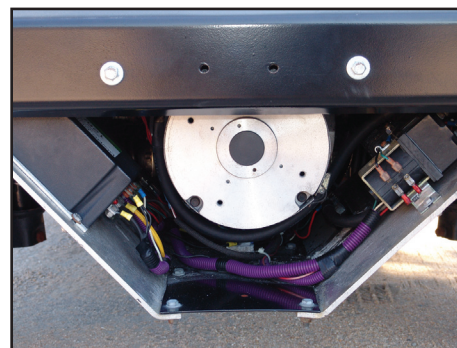
eter that controls engine speed by varying the voltage. Starting off in first, he shifts to second at about 20 mph, continuing on up to a top speed of about 65.

Since the car was designed as a commuter, Andrew rarely exceeds 45 mph during the 25-mile round trip between work and home. He estimates the range on a full charge to be about 45 to 50 miles. The Russco Engineering battery charger, behind the passenger seat, senses the level of charge in the battery pack and tapers the charging current accordingly. Plugging in at night brings the batteries up to full power but uses such a small amount of electricity that it is hardly noticeable on the family electric bill.

Although there are few frills to the car, the Wombat is equipped with headlights, taillights, side reflectors, wipers, and everything else necessary to be street legal. The stereo inside is a Panasonic CD player with Jensen speakers in the kick panels and Panasonics behind the seats. Jeep seats (also from Whitney) provide a comfortable ride and the side curtain doors have clear plastic windows that unzip for fresh air. The convertible top can also be removed for highway sun-tanning excursions. A separate 12-volt system runs the lights, turn signals, horn, and radio, drawing its charge from a DC-to-DC converter connected to the 120-volt main battery pack.

Gauges on the dash include a speedometer along with a 0-150-volt meter that, like a gas gauge, measures the voltage in the main 120-volt traction pack. When it starts dropping, you know you'd better plug in soon. The second gauge measures motor amperage and the objective is to run at high-voltage and low amps to maximize range. The unit is sensitive enough to detect head winds and tail winds. The final gauge monitors the separate 12-volt system. Everything else is quite straightforward with the exception that when under way, there is virtually no noise except for a little drivetrain rumble and the sound of wind rushing past.

Painted a Pewter Metallic to add an aggressive look, the Wombat sports a scaled-down brush guard and rear luggage rack as part of the kit. The heavy-duty spare tire rack continues the offroad theme, as do the large 15" wheels (JC Whitney) wrapped in Michelin X-series radial tires (235/75-R15), specially designed to minimize rolling resistance. Future plans include the investigation of a smoother, more aerodynamic body. Since both the original Hummer and the smaller Wombat have all the aerodynamic subtleties of a brick, Andrew feels that higher



speeds and longer range could be achieved with something that presented a lower coefficient of drag.

How is the car to live with? The reception is always positive with guys thinking the car is 'cool' and gals thinking it's 'cute.' Both genders are impressed with the electric powertrain. How is it on the road? Andrew learned early about the concept of "growing gas," having run out of power several miles from home. Optimal driving techniques stretch the range of the vehicle but most of us are out of practice when it comes to driving economically. The story has a happy ending since in just a few minutes, the batteries recovered enough so that he could resume his trip home. He has been driving the car for three years and there have been

no maintenance requirements other than occasionally adding water to the batteries. He estimates they will need to be replaced approximately every five years. **KCB**

Wombat Car Company

Dept KCB
10013 NE Hazel Dell Ave. #147
Vancouver, WA 98685
360/335-8215
www.wombatcar.com

Electro Automotive

Dept. KCB
PO Box 1113-W
Felton, CA 95018-1113
831/429-1989
www.electroauto.com