



Born to be Green - Notes and Ruminations  
By Gary Carlson

For those of you who are mechanically ignorant, I'll go over the transmission of power in this mean motor scooter. 1. Mouse sees the cheese. 2. Mouse wants the cheese. 3. Mouse runs after the cheese, spinning the Rodent Reactive Rotator (RRR). 4. RRR turns the drive gear, pulling the drive chain around the driven gear. 5. Driven gear turns the rear tire in an explosion of anti-social fury and smoke. 6. Machine heads out on the highway.

I built the frame of this from 1/4" soft copper tubing, for bendability and ease of soldering. This was one of those deals where all the engineering was interdependent and the overall form couldn't be determined until all the pieces were in place. This means that I was working from nothing but a sketch and constantly wondering where to put the bends, where to put the struts, how much rake would this give me, how much room that would give me. Then there was the problem of building symmetrical pairs (left side, right side), knowing that 1/8" deviation would make the whole frame cattywampus and the wheels wouldn't go on straight. So I went through a lot of copper tubing.

The mouse was the determining element in this piece. Everything flowed from the mouse. The rotator had to be mouse size. The driving gear had to be rotator size. (Like most people, I have a footlocker full of antique wind-up clock parts and gears, nearly all of which are prettier than mechanically required. See ANT FARM 1.2.3.4. sub-head WHY BOTHER for a fascinating and soul-enriching diatribe on this very subject.) The rear tire had to be driven gear size. The frame ... you get the idea.

If you go looking for these fake mice you will find that they are all over, in many stores where you wouldn't expect them. There is also great variation in color and quality. So there must be many fake mouse factories in foreign countries or a very big factory with different product lines. It may be useful (in appreciation of global diversity) to imagine a conversation between a couple of sweatshop employees in this field.

People's Heroic Worker #1: Do you ever wonder what happens to all these fake mice we assemble?

People's Heroic Worker #2: No. I just try to make my quota.

People's Heroic Worker #1: Yes, me too, but where do all the mice go?

People's Heroic Worker #2: (after glancing left and right) Our Gallant Supervisor Dieu Wakka Dieu says the Americans buy them to give to their capitalistic cats.

People's Heroic Worker #1: Ah so. Confucius say a plump cat is more desirable than a skinny one (smacks lips) but how can the feeding of fake mice achieve this achievement? (Note: some translations may appear redundant to the Western mind.)

People's Heroic Worker #2: Surely this is an American mystery. They are inscrutable.

People's Heroic Worker #1: Indeed so. And don't call me Shirley.

Enough about the mouse, except that it had a very unmouselike long, flat, hairy tail which I replaced with a shorter pink hairless one. (Anatomically correct mouse – what a concept.)

I mounted quite a search for proper tires and eventually decided on a roll of masking tape for the rear and a roll of electrical tape for the front; both painted gloss black. The electrical tape remained kind of sticky on the sides after the paint dried so I sealed it with shellac (otherwise it was always going to be collecting dust and hair, etc). Then I fabricated tricky wheels of wood after it became apparent that I would go nuts trying to set any kind of spokes inside the rolls of tape. I found some cunning stuff called Rick Rack in the fabric department for tire tread. I guess people use it for borders on doilies or something but it looks exactly like tire tread when pulled over the circumference of a roll of tape. It comes in different sizes: medium for rear tires, small for front. Wonderful stuff. Rick Rack. Rhymes with paddywhack.

In keeping with the “green” theme I used a little candle stub for the headlight. The housing is a Tanqueray bottle cap and I found a wristwatch crystal that perfectly snapped in place for a lens. (As you might expect, I have a box full of junk watches and a couple of small ones made for nice little gauges mounted on the panel forward of the fuel tank.)

If you think making a piece of cheese is easy, try it sometime. You'll get angry and surly and come running back to this text for instruction. Use balsa wood (you'll find out why in a minute). With a 1/8” drill at high speed (Dremel tool; lower speed will leave feathering and hanging chad) punch holes in the top, bottom and sides, at different angles, of a 1” piece of balsa. About seven or eight holes, some all the way through, some not. Then use a brand new razor blade to cut the block into the classic wedge shape. Make only one clean pass with the razor blade – no sawing, rocking or shaving. Make the cuts through the center of a couple of the holes. These center-hole cuts will give the edge of the wedge the perforated look that you absolutely must have. (It's not enough that the wedge

is perforated – the profile must show this.) If a strip of the grain lifts or if your side slices are not geometrically correct relative to the top and bottom planes, start over. Do it as many times as necessary to get a decent looking piece of cheese. Don't be a quitter. Now you're ready to move on to the next important phase of cheese making. Paint it yellow and you're done.

I tried using a piece of thread to dangle the cheese in front of the rotor (to motivate the mouse, if you still don't get that part) but it (the cheese) didn't weigh enough to pull the thread taut. Usually you can overcome this common problem by pulling the thread over a chunk of beeswax to give it more body. Beeswax is handy to have around and may be procured the hard way (ouch) or where you get fly tying stuff or (surprisingly) a pool table supply company. (When you change the felt on your table you can fix any little divots in the slate by melting beeswax in the hole and scraping over it with a heated spatula or putty knife – like using a shellac stick on furniture dings.) Anyway, the thread still wouldn't hang straight enough so I hooked a piece of 22 gauge wire into a cheese hole and hung it like that. Wire can also be problematic since it usually comes off a spool and the curve must be straightened out. But that results in little bumps that can be rolled out by placing the length of wire on a hard flat surface and rolling over it with another hard flat surface (block of wood) while you feel the rolling action becoming smoother and smoother.

I fabricated the seat from scratch with a piece of sheet brass and a layer of foam and leather stretched, epoxied and clamped underneath the edge. Faithful readers will notice that I use a lot of epoxy. It is very strong and can be placed with precision. However, it should only be used on bare surfaces; if applied over paint the bond is only as strong as the coat of paint. The seat is long and slung back to accommodate the anticipated bitch and therein lies a small problem. Motorcycles (and choppers in particular, I guess) carry a lot of affect and some people to whom I've shown the piece get all enthused about what a nifty little machine it is and fail to even notice that it's mouse powered. My purpose was to raise awareness of polar bears and such but I may have built the thing a little too good.