

Life in the slow lane

Tired of waiting for the Joule to hit local showrooms, Richard Asher takes to the streets of Cape Town in a golf cart...

PHOTOGRAPHY: PEET MOCKE

THERE'S NOTHING LIKE hitting the open road in an open car. All the better when the morning sun shines bright in a perfect sky and crisp winter air tickles your ears. The euphoria of that first burst of throttle! How alive you feel! You nestle back in your seat, plonk your elbow on the window sill and try not to smile too smugly. Or so I'm told. Ja, I've got my open car alright. I've got the blue-sky day too. But there's no door to lean on. And these seats were not made for nestling. I have all of 4kW to call upon. My top speed is a shade above 30kph. And I've got a Prius on my case.

But I'm smiling all the same. What else can you do when you're chugging along a public thoroughfare in a golf cart? My Melex four-seater is taking the ride of its life today. I've just escaped the gates of Westlake Golf Club in Cape Town. A snorting, impatient white Toyota is looking for a way around me on this narrow byway (it failed: think Mansell and Senna at Monaco in 1992), but that's nothing compared to what I'll face in a minute. I'm about to hit Main Road on a Friday morning.

It had all started during my regular Sunday round. Clearly the golf wasn't holding my attention, because my mind began to wander to the vexing questions of our time. The Arab Spring was reaching fever pitch and the price of petrol dancing to the rhythm of Colonel Gaddafi and King of Bahrain's megalomania. And my green conscience was starting to make me feel guilty about going anywhere by car.

That's when my golf partner's vintage Melex model went catapulting past me. Lightbulb

moment. Why all this debate about viable electric cars? They've been around for years! But golfers hog them all.

Alright, sure, golf carts would have drawbacks as a commuting option. They're downright slow compared to a regular car. You can't drive very far without a recharge. And, well... that's about it. Anything else you care to mention could probably be tweaked easily enough for satisfactory commuting.

I did some research about those drawbacks. Realistic speed? Somewhere between 30kph and 50kph. As for the range, a state-of-the-art Melex cart might stretch to 55km on the flat. So if you're driving 20km on an average weekday (is this you?) then maybe it wouldn't be such a wacky idea.

Okay, there was another tiny stumbling block. Golf carts aren't road legal in South Africa. In a nutshell, the authorities have yet to show the imagination to help cars like this onto the road while we wait for more ▶



efficient and cost-effective electric cars.

But that was not going to scupper my experiment. I got hold of Melex, borrowed a spanking new golf cart and found out how it would handle life on the streets.

Anyone who has ever tried to cross Cape Town's Main Road knows that locals just love driving cars down it. Largely tourist-free, it is the city's true artery. This is the working man's road, infested with taxis and lined – depending on the time of day – with car dealers, hawkers and hookers. In many places it's the dividing line between leafy suburbia and rough industry, and those worlds collide with a bang on Fridays. Everyone is either heading home for an early weekend – cursing traffic – or trying to deliver something to a workshop – cursing traffic.

It was into this tempest of automotive bad humour that I edged my dinky golf cart. I was thankful that the guys at Melex had fitted indicators and brake lights for this mission. I was going to need them.

What mission, exactly? To drive a couple of kilometres to the nearest vehicle registration centre and see what they made of my wagon. And to get a feel for what it was like to drive on a road instead of a fairway.

To start with the second question – it's slow. 32kph is not going to hack it on a one-lane road. It creates a long queue. But with diff adjustments (there's no gearbox) it can manage 50kph, which could make all the difference. At least then it might hold its own against the rickety taxis that routinely belly-crawl along this stretch.

I was lucky to have an ally for my journey. A photographer leaning out of a bakkie in front of you makes other motorists tolerant, because they can see you're doing a fun shoot. Only once was I hooted at. I doubt they'd be as patient if I became a regular feature of Main Road life.

But while the cart may be a traffic-maker when it's moving, it makes up for it at the robots. You put your foot down and it goes. Nobody will be waiting behind you while you fiddle with your clutch and handbrake, which is engaged with a firm push on the brake pedal and released simply by hitting the accelerator.

The throttle takes some getting used to though, as it's quite hard to regulate your speed accurately. The pedal isn't as sensitive to small inputs as a road car is, so often you find nothing happening... until you suddenly lurch forward way faster than you'd planned.

The regenerative braking system is good – the 'engine braking' when you come off the throttle is so remarkable that you barely need the rear cable brakes unless it's an emergency. Handing-wise, it's very direct and kart-like. You can feel you're not in a regular car, but it's easy enough to get used to.

Another niggle: golf carts bounce! I hit a bump and nearly got thrown out. For decent road safety you'd want improved suspension and a bit more side protection. After all, you've got 4kW and rear-driven wheels. Those wet-weather slides could get hairy.

Such things are fixable, however, and Melex are working on doing just that. Outings like this one help them learn exactly what needs tweaking as they bid to take their range of electric vehicles from farms, retail parks and golf courses to the streets.

Ah yes, registration. We were never going to pass a registration or a roadworthy, despite our Plod-pleasing mods including indicators, headlights, brake lights, hooter and seatbelt. This was really a fact-finding mission and an excuse to take the cart on the road with manufacturer plates. In all seriousness, though, it's quite difficult even to know where to start with such a 'special' car.

I'd made calls to various authorities beforehand, the first problem being to figure out which ones to try. Traffic department? The roadworthy centre? The City of Cape Town? Provincial government? The eNatis people? The police? All of the above seem to have some stake in vehicle registrations, but phoning around just made me more confused as I got several different stories. The internet gave me no definitive answers either. In fairness you'd face the same problem anywhere in the world, because nobody ever writes this stuff down in one place for people whose dads don't know these things. The answer, as it invariably is, is just to visit the nearest of the above in person and take it from there.

Rather than tempting fate at the traffic department, though, we'd chosen the nearest roadworthy centre as a safer bet. Upon arrival, it didn't take long to learn of a seventh authority – the National Regulator of Compulsory Specifications. Apparently that's the first port of call for a new vehicle design. Only with approval from the NRCS (essentially an SABS offshoot) can it be registered. Now you know.

Without NRCS papers, it's hard for the guys at the testing centres to know what standards they would judge the car by. But we did hang around long enough to learn that long pit all cars have to drive over during a roadworthy. Inching up to the edge of that precipice for a photo was easily the day's scariest episode.

Seriously, though, getting a golf car road legal isn't wishful thinking. The fancy-pants Garia Monaco, with its top speed of 40kph, is street legal throughout the EU, where it fits into the rule book as a category L7 quadricycle 'whose unladen mass is not more than 400kg, excluding batteries'. Trouble is, our National Road Traffic Act doesn't allow for that kind of light four-wheeler. ▶



At home on the (driving) range. Top speed not the issue, battery good for a few rounds. Mustard jumper all in order at Westlake. Not convincing below, when all the officials ponder the legal issues at the closest roadworthy centre. Surely those hot alloys count for something?





Despite the addition of indicators, headlights, seatbelt and hooter, our cart didn't cut it with local authorities. Richard points out the array of safety features – seatbelt, brakes, grab handles and um... well that's about it really



MELEX 48V 4-SEATER GOLF CART

POWER | 4kW from a 48V AC motor
CONTROLLER | Curtis 1268
BATTERIES | 6V Trojan T105 (Eight units)
RANGE | 55km (loaded, on a flat road at 20kph)
TOP SPEED | 32kph
DIMENSIONS (L/W/H) | 2350/1180/1750mm
MAXIMUM LOADING WEIGHT | 340kg
STEERING | Single-stage rack and pinion
CHARGER | 240V~50Hz-60Hz, output 48V, 25A
PRICE | R52000
MASS EXCLUDING BATTERIES | 240kg



'We generally derive our specs from Europe, but things like L7 vehicles are not included mainly because of the way people drive around in South Africa,' says NRCS inspector Dewald Horn. 'We are having discussions with government on that at the moment but a lot of people are against it.'

But the battle will go on. Melex's latest prototype, which arrives from China in a couple of weeks, will be right-hand drive in accordance with the NRTA. It will also sport a speedometer and all-round hydraulic braking. Lights, self-cancelling indicators and wipers are all fitted, which will tick plenty of boxes. But it sounds like golf cart manufacturers still need the law to change.

So, would I make the R52 000 investment? If the legality issues were sorted, I would give it serious thought.

As far as convenience is concerned, a golf cart is never going to compete with a car, primarily because it's slower and won't go as far. We all live impatient lives, and the slowness would be the hardest adjustment.

But dealing with slowness is simply a state of mind, or a willingness to get up earlier. After all, people do ride bicycles to work without being considered mad. And my golf cart would

be faster than a bicycle!

As with anything out of the ordinary, the first people to try it would risk becoming pariahs of the road. Let's not forget, though, that the very first cars faced a measure of unpopularity themselves, before going on to do rather well for themselves. Changing human herd behaviour is a notorious task, but, once an idea reaches critical mass – bingo.

Why would I risk pariah status? Well, for a start, if it saves money then I'll be the one laughing. Especially if another oil crisis came along. And if driving a golf cart makes for a smaller personal carbon output, then perhaps sacrifices are worthwhile.

I'll be the first to admit that as things stand I'd still need to have a regular car for holidays and longer trips, but with limited use comes the option of sharing. Much would also depend on where I could afford to live – more than 20km to the office might not be viable. And I'd have to factor in Eskom's guaranteed-to-increase charges.

The real deal-clincher, though? I could drive it to the golf club and straight onto the first tee, without the purgatory of trying to wedge my golf bag into the unyielding boot of my Polo Playa. Sold! **TC**

DOING THE SUMS

CARBON AND COSTS

AS WITH ANY electric vehicle, a carbon cost results from recharges using a grid largely powered by dirty coal-fired power stations. Per kWh in South Africa you can currently reckon on an average total emission of 1kg of carbon dioxide by the time you tap into electricity at your wall.

I did a few sums on the Melex website's own carbon comparison calculator, using the 1.4 Polo Trendline's quoted petrol consumption figure of 8.3 litres/100km and a daily commute of 40km as an example. The truth is that although the average golf cart has an edge in terms of emissions, it's nothing earth-shattering – if you'll pardon the phrase. For 20 days' use in the month, you more or less save one day's worth of emissions.

Note, however, that the petrol car's figures do not take into account emissions associated with fuel production and transport, so the golf machine's emissions savings are arguably more substantial. A (pricey) solar panel on the golf cart can widen the gap still further, and let's remember too that our national grid should be reducing its carbon naughtiness as

alternative energy sources creep in over the coming years.

What about running costs? I got lost in the layered labyrinth that is Eskom's tariff spreadsheet, but I do know that I pay 54.70 cents per kWh where I live. Melex's quoted 'consumption' rate is 0.17kWh per kilometre. So for my 40km ride, that's just R3.67. Even if you're paying double my electricity rate, that's still very favourable.

Let's return to the Polo. Fuel for the same 40km trip will come to R32.90 at R9.92/litre. This is undoubtedly where the golf cart scores the most points.

An annual service for brakes, suspension and differential oil comes in at R1000, but unlike so many vehicles you could realistically do this yourself at home.

The big fly in the soup is the fact that you need to replace your R9000 battery pack once every 1000 charges. Which could be anywhere between three and six years depending on your usage pattern.

Check out the figures for yourself by using the emissions and cost calculators at www.electro-vehicles.co.za

■ THANKS TO MELEX ELECTROVEHICLES FOR THE USE OF THEIR GOLF CART. TEL 086 111 3968