

## Autonomous and electric powered cars

I'm fascinated by the fast-changing world of technology, especially in the field of motoring.

What inspired me to write this article was a motoring programme shown this week about how a Tesla and a Mercedes E Class, both kitted out with autonomous driving technology, drove themselves around a thirty mile mixed route in the San Francisco Bay area with only 10% driver involvement for the odd minor adjustments.

The show ended one step further with a visit the Ford testing grounds, where the journalist seated in the rear gave a verbal request and destination.

The Ford Fusion figured out its own route and did the job without any input by the accompanying test engineer.

This was done on private roads since no legislation exists – YET.

The exponential curve of technological advancement will mean that there will be autonomous electric vehicles on the road overseas by 2020 - maybe sooner.

From a quote by author Udo Gollub in Berlin, autonomous cars will reduce lives lost in motor accidents significantly from one accident every 100 000kms to one accident every 10 million km.

He also states that insurance companies will experience a massive loss of business due to these results.

So, I would be terrified if I chose a career in the taxi driving business. Imagine the lives saved in taxi related accidents in South Africa alone.

Now, don't get me wrong, I'm an avid motoring enthusiast and I'll be first in line to hear a car with a V8 motor start up or hear the screaming cry of a Ferrari using flat plane crank technology to achieve those high revs, but let's face it, it is all so complex – spare a thought for the poor mechanic when a six year old Audi R8 V10 arrives on his forecourt, suffering from an intermittent overheating gremlin! Where does he start?

Christmas 2014, I found myself dutifully following my wife around an American shopping mall – all much the same as in SA I can assure you ... just the names are different.

I really did not expect to find a Tesla motor showroom on the second floor between a Lindt Chocolate shop and a Swarovski Diamond showroom.

On display? A black Tesla Model S. Absolutely beautiful.

Fantastic performance and 420km range for the 85kWh motor. I've never seen such a huge info-screen on any car since.

I believe a much more affordable Model 3 will be on the floor by the end of 2017.

Notwithstanding that release date, over 350 000 reservations have been placed.

What really caught my eye was the display of an aluminium chassis, with the wheels, brakes, suspension and steering system and the *pie'ce de resistance*: the rear mounted electric drive motor in a cradle with two cable attached!

As simple as that.

No complex radiators and water pipes, no air cleaner, oil filter, twin turbos, no maze of pipes and cables.

Simplicity itself.

There is a dual motor all-wheel drive available too.

Roll on the future!



Mike Gilchrist.  
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