

Carbon Monoxide poisoning
in old vehicles.
By Bill Smith July 2011

I had forgotten about this issue with old cars until I looked at Iain Simpson's recently acquired 8th series Lambda on the cover of the latest edition of the Australian Lancia register magazine.

The car was shown on a cool winter's day, possibly rain on the horizon, and so the hood and side curtains were all in place.

I had driven a customer's car with hood and side screens in place several years ago, whilst testing for an unrelated problem and I found the exhaust fumes suffocating. It turned out to be the perennial Lambda problem of the exhaust manifold to exhaust pipe clamp nut coming loose (1st to 7th series), which with a closed up car gradually fills the cabin space with various gases some of which are deadly.

The exhaust contains the deadly Carbon Monoxide gas, amongst other gases. Carbon monoxide is odourless.

I found that **the light aircraft industry had a solution** to this problem as they sell a credit card size sensor strip that detects the gas and changes colour. These sensors now have a life of 18 months (previously they only lasted a month), at which time they need to be replaced.

Sensor Strips

These are available from a number of suppliers such as Flight Store, Phone 0755368694

Web www.flightstore.com.au Look under accessories.
They cost about \$15. See photo below:



Whilst the Lambda has some particular problems with leaks in the exhaust (including poor head to exhaust manifold sealing on all models) and poor sealing around the dash area, genuine leaky floor boards etc in my humble opinion this is by no means unique as all old cars, classic included, will at times suffer from this problem.

A 40 year-old car of any brand will have firewall seals that have deteriorated, seals that have gone missing etc as well as excessive piston blow-by and leaking exhaust joints.

The fresh air inlet on many cars in this classic group is placed just behind the bonnet rear top seal. The problem is much more acute if the passenger cabin is semi sealed.

The ever present force 9 gale in open vintage cars does not seem to let the problem build up to dangerous levels.

I can only recommend this simple device to owners, as it is cheap insurance for all passengers and drivers, as well of course for children.

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