

# CASE HISTORY PORSCHE BOXSTER



**VEHICLE FAULTS:-** Engine management light coming on every 200 miles although the vehicle appeared to drive fine

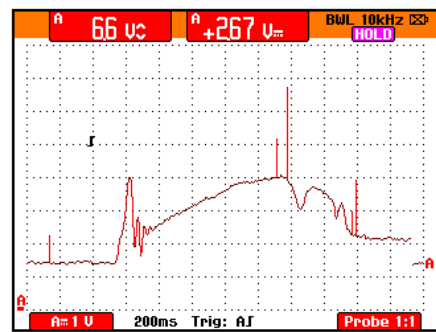
**VEHICLE HISTORY:-** We were asked to assess this vehicle with the engine management light coming on over a long period of driving time, it had recently been purchased from a local car sales.

**TESTING: -** Reading the engine management faults revealed two stored faults, one for lambda sensor interruption and one for fuel trim on one bank, testing the vehicle we couldn't fault it, lambda sensors and fuelling all tested ok. The vehicle was sent out for further long term testing. Upon return the vehicle had covered 200 + miles before the warning light had returned, reading the fault memory revealed the same lambda fault so the decision was made to replace this lambda sensor and reevaluate over long term testing.

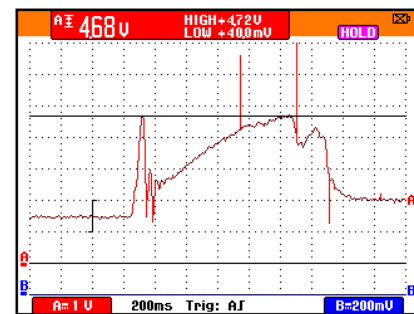
Again the engine management warning light came on after approx 200 miles this time when the fault memory was read it had two faults stored for long term fuel adaptation caused by a lean mixture and no lambda fault.

After carrying out in depth testing using our specialist equipment including a smoke machine testing for any inlet air leaks and our Fluke scope the most likely cause of the lean mixture affecting both banks of the flat six engine was a marginal low output from the air mass meter.

When the air mass meter was removed for replacement and compared to the new Bosch unit it was noticed that the part numbers were different checking the original part number it was for a different car in fact a Porsche 911.



INCORRECT AIR MASS METER



NEW AIR MASS METER

**CONCLUSION :-** At sometime in its previous life the vehicle had been fitted with the wrong air mass meter and this was giving out a lower than expected reading causing a lean mixture coupled with an intermittent lambda sensor fault.

