

These tests were carried out at Unit 33, Sugarbrook Road, Aston Fields Industrial Estate, Bromsgrove, B60 3DN, England, on September 29<sup>th</sup> 2008.

Vehicle: **Rover**

YOM: 2003

### HC Testing:

European emission standards for **passenger cars** (Category M<sub>1</sub><sup>\*</sup>), g/km

Tier	Date	CO	HC	NO <sub>x</sub>	HC+NO <sub>x</sub>	PM
<b>Diesel</b>						
EM1	January 1989	2.72 (3.16)	-	-	0.97 (1.13)	0.14 (0.18)
Euro 2, <a href="#">IDI</a>	January 1993	1.0	-	-	0.7	0.08
Euro 2, <a href="#">DI</a>	January 1993	1.0	-	-	0.9	0.10
Euro 3	December 1997	0.64	-	0.50	0.56	0.05
Euro 4	January 2003	0.50	-	0.25	0.30	0.025
Euro 5 (future)	September 2009	0.50	-	0.18	0.23	0.005
Euro 6 (future)	September 2014	0.50	-	0.08	0.17	0.005
<b>Petrol (Gasoline)</b>						
EM1	January 1989	2.72 (3.16)	-	-	0.97 (1.13)	-
Euro 2	January 1993	2.2	-	-	0.5	-
Euro 3	January 1997	2.30	0.20	0.15	-	-
Euro 4	January 2003	1.0	0.10	0.08	-	-
Euro 5 (future)	September 2009	1.0	0.10	0.06	-	0.005**
Euro 6 (future)	September 2014	1.0	0.10	0.06	-	0.005**

\* Before Euro 5, passenger vehicles > 2500 kg were type approved as [light commercial vehicle N1](#) -

\*\* Applies only to vehicles with direct injection engines

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  B O S C H
Basic Emission Test
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      TEST STATION
      CHIPPED U.K.
UNIT 33, SUGARBROOK ROAD
ASTON FIELDS IND. EST.
BROMSGROVE, B60 3DN.
TEL: (01527) 579345
VTS number:
-----
BEA version:      V1.20-UK
AMM version:      000-B6
-----
Date:             29.09.2008
Time:             10:30
-----
      VEHICLE DETAILS
Reg. Number:      KX53JZA
-----
      DESCRIPTION
Engine temp. measurement
by manual observation of
temperature gauge
-----
      Fast Idle Test
-----
Speed             2820 /min
CO                 0.04 %vol
HC                 72 ppm
Lambda            1.02
-----
      Natural Idle Test
-----
Speed             840 /min
CO                 0.00 %vol
-----

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As you can see, the CO was at 0.04% with HC at 72ppm.

We then added 11ml of Oxytane directly to the fuel supply to give the desired balance of 1ml to 1 gallon of fuel and allowed the car to idle for 5 minutes giving the fuel enough time to mix.

We proceeded to do a direct comparison test using the exact same procedure as the previous test.

The results were staggering. We saw a reduction in hydrocarbon's (HC) of 54% bringing them down from 72ppm to 40ppm. This is in addition to a drop in CO emission by 50%, down from 1.04% to 1.02%.

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Date:          29.09.2008
Time:          10:50
-----
      VEHICLE DETAILS
Reg. Number:    KX53JZA
-----
      DESCRIPTION
Engine temp. measurement
by manual observation of
temperature gauge
-----
      Fast Idle Test
-----
Speed          2810 /min
CO              0.02 %vol
HC              40 ppm
Lambda         1.01
-----
      Natural Idle Test
-----
Speed          820 /min
CO              0.00 %vol
-----

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Although the car would have passed a UK emission test for an MOT, the car was still in need of reducing the emissions as the HC output was fairly high for such a low mileage car.

### **Conclusion:**

The end result of this product is a proven drop of over 54% in Hydrocarbons and 50% in CO.

The results have surpassed all expectations, as just 11ml of Oxytane totally changed the cars emissions. An added benefit of the testing was a considerable drop in engine noise within moments of adding the Oxytane to the fuel tank. A quieter and smoother engine note was the result.

**Simon White.**