

# Record of a compression and performance inspection before and after an engine is treated with Xado Revitalisant

#### Dates:

Test 1: 30. November 2004 Test 2: 13. January 2005

Inspection locations: Aurego GmbH, Wuppertal (OPEL)
Performance test stand General German Automobile Association

Vehicle: Toyota Yaris Verso
Petrol engine
Odometer reading beginning of test: 141375 km
Odometer reading testing: 144460 km

# TEST 1

#### 30.11.2004, 14:30 o'clock

Odometer reading 141375, compression examination with Aurego GmbH, Wuppertal Barmen





#### **30.11.2004, 14:40** o'clock

For the compression examination the spark plugs must be taken out.





#### 30.11.2004, 15:00 o'clock

The compression examination is completed.



**30.11.2004, 16:00** o'clock

Odometer reading 141432, engine test on a General German Automobile Association test station roller bed stand



#### 30.11.2004, 16:08 o'clock

Before test commences



30.11.2004, 16:13 o'clock

The car is attached to the measuring instruments.







## 30.11.2004, 16:18 o'clock

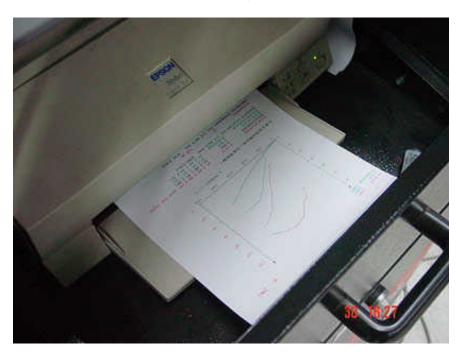
The examiner starts the performance inspection.





#### **30.11.2004, 16:27** o'clock

The result is printed.



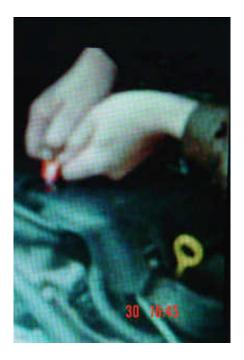
30.11.2004, 16:30 o'clock

The performance inspection is completed.



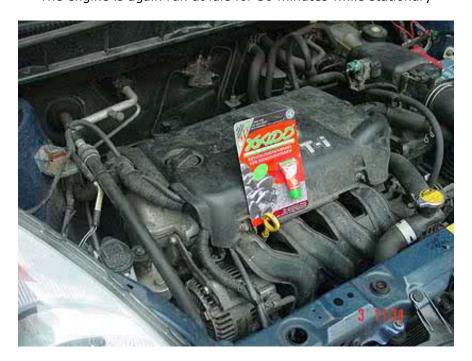
#### 30.11.2004, 16:45 o'clock

The first tube of Xado Revitalisant (video fixed image) is squeezed into the Engine oil filler neck. The engine is then run at idle for 30 minutes while stationary.



3.12.2004, 11:30 o'clock

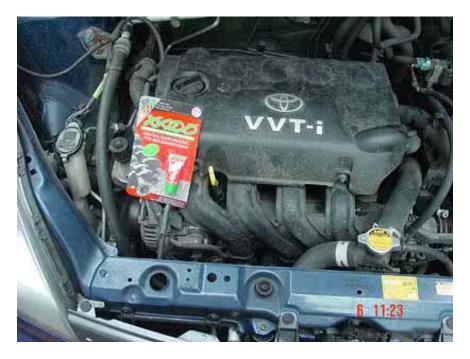
Odometer reading 141614, The second Xado tube is added, The engine is again run at idle for 30 minutes while stationary





6.12.2004, 11:20 o'clock

Odometer reading 141736, the third Xado tube is added, The engine is again run at idle for 30 minutes while stationary





#### **END OF TEST 1**

# TEST 2

## 13.1.2005, 11:00 o'clock

Odometer reading 144394.









#### 13.1.2005, 13:48 o'clock

Odometer reading 144458, engine test on a General German Automobile Association test station roller bed.





#### 13.1.2005, 14:04 o'clock

The car is attached to the measuring instruments



13.1.2005, 14:05 o'clock

The examiner starts the performance inspection.



#### 13.1.2005, 14:06 o'clock

The performance inspection runs.



13.1.2005, 14:15 o'clock

The performance inspection is completed.



# **Results of the Engine Tests**

Date	30.11.2004	13.1.2005
Standard achievement:	65.0 KW (88.4 HP)	68.5 KW (93.1 HP)
Engine performance:	64.5 KW (87.7 HP)	68.0 KW (92.4 HP)
Wheel achievement:	39.5 KW (53.7 HP)	43.5 KW (59.1 HP)
Dragging achievement:	25.0 KW (34.0 HP)	24.5 KW (33.3 HP)
Maximum achievement:	6080 U/min	5930 U/min
Maximum torque:	118 Nm with 4550 U/min	125 Nm with 4660 U/min
Maximum speed:	156 km/h	157 km/h
Maximum number of revolutions:	6120 U/min	6250 U/min
Compression values in bar		
Cylinder 1	11,5	14,2
Cylinder 2	10,75	13,9
Cylinder 3	11,6	14,2
Cylinder 4	11,25	14,0

#### LEISTUNGS-DIAGNOSE

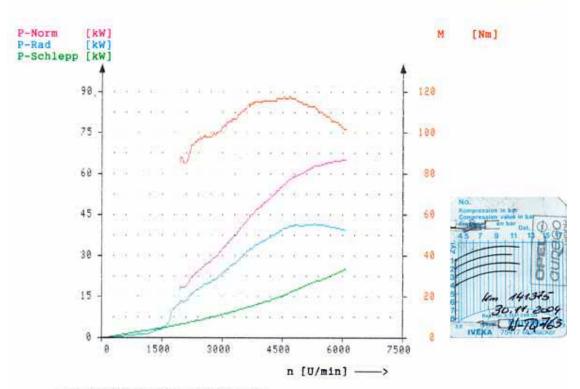
ADAC SERVICE-CENTER GELSENKIRCHEN Tel. 0209/777031

: Toyota KM-Stand 141432 KFZ-Typ Motor-Typ : Otto Motor Kennzeichen: W-TQ 763

Prüfer : Br.

Datum : 30.11.04 : 16:22

Pogramm-Version V 1.40 Regler-Version V 1.10 Meβbox-Version V 1.05



#### LEISTUNGS-DATEN:

P-Norm Norm-Leistung : 65,0 kW ( 88,4 PS) nach DIN 70020 Motorleistung

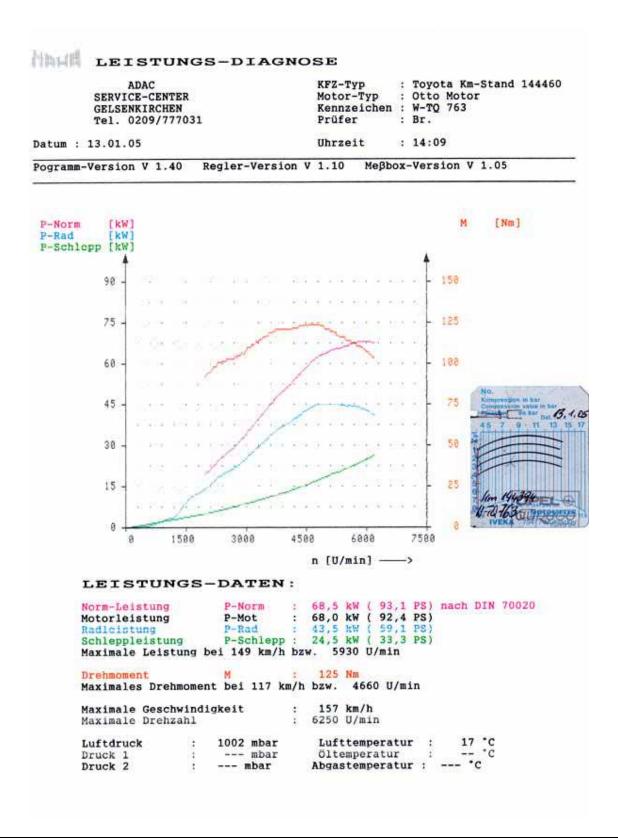
P-Mot : 64,5 kW ( 87,7 PS) P-Rad : 39,5 kW ( 53,7 PS) P-Schlepp : 25,0 kW ( 34,0 PS) Radleistung Schleppleistung

Maximale Leistung bei 155 km/h bzw. 6080 U/min

Maximales Drehmoment bei 116 km/h bzw. 4550 U/min

Maximale Geschwindigkeit Maximale Drehzahl 156 km/h : 6120 U/min

992 mbar Lufttemperatur : 15 °C Oltemperatur : -- °C Abgastemperatur : --- °C Luftdruck Druck 1 --- mbar Druck 2 --- mbar



Note: The important measurement when comparing both graphs is the right hand graph scale. The first graph shows a scale of 0 to 120 Newton meters, where as the second graph indicates a scale of 0 to 150 Newton meters.

The important curve in both diagrams is the top curve. You will notice that this is much lower in the second diagram, but due to the scale mentioned above the values and readings in the second graph are in fact higher than the first graph.