

ACT UNDER CONTRACT No. 10-Kh OF 07.06.2001

UAZ-3909: all cylinders brought to one level of compression, no teardown

JSC "Krasnoarm. Khleb", transport shop · treatment and control measurements performed by LLC
"Gruppa-Tekhnoservis"

Volgograd, Russia · contract No. 10-Kh of 07.06.2001 · control measurement after 1 803 km of running

PRODUCT

Treatment by XADO
Technology
gel, single 36 ml charge into the
engine

TEST OBJECT

UAZ-3909 vehicle
petrol engine · state plate V 224
US

DOCUMENT TYPE

Act under contract No.
10-Kh
signatures and seals of the
parties

EQUIPMENT

UAZ-3909, plate No. V 224
US

MILEAGE AT TEST START

35 390 km

WHAT WAS MEASURED

Compression in all four cylinders — before
treatment and after **1 803 km** of running

Single treatment: {{36 ml}} of gel into the engine. Control measurement — after 1 803 km of normal service in the company fleet.

Key results

compression evened out across the cylinders

↑ **13-65 %**

compression in worn cylinders, 5.5-7.5 → 8.5-9.1

Compression by cylinder — before treatment and after 1 803 km of running

CYLINDER	BEFORE TREATMENT	AFTER 1 803 KM	CHANGE
Cylinder 1	9.0	9.0	no change
Cylinder 2	8.0	8.2	+0.2
Cylinder 3	7.5	8.5	+1.0
Cylinder 4	5.5	9.1	+3.6
Spread between cylinders	3.5	0.9	-2.6

The compression unit is not entered on the act form — the values are given exactly as recorded in the document.

Conclusion of the act

Before treatment the engine ran with a dip: compression in the fourth cylinder was **5.5** against **9.0** in the first, the spread between cylinders — **3.5**. After a single **36 ml** charge of gel and 1 803 km of normal service all four cylinders lie within **8.2-9.1**, and the spread has narrowed to **0.9**. This is exactly how the mechanism works: the metal-ceramic layer builds up where there is wear and does not build up where there is none — the most worn cylinder gained the most, while the cylinder with the best initial compression stayed at its previous level. Compression cannot rise above the nominal value set by the manufacturer, so bringing all cylinders to one value is the maximum achievable. In the conclusion of the act the parties recorded: "as a result of the treatment petrol consumption dropped by 10%, compression evened out, the engine began to run more smoothly, the vehicle became more responsive, and the dynamics of the vehicle improved".

XADO

© XADO. All rights reserved.

The results refer to the petrol engine of a UAZ-3909 vehicle under the operating conditions of the JSC "Krasnoarm. Khleb" fleet; on other equipment and in other duty modes the figures may differ. The original act with the signatures and seals of the parties is published in full and available for download.