

ENGINE TREATMENT REPORTS · 10.10.2003

UAZ-3962 and VAZ-21093: compression up, cylinders evened out — no teardown

Seid-Transavto LLC · reports approved by General Director R. S. Kuznetsov, signed by Chief Mechanic P. V. Balukhtin and by I. V. Pavlov, Director of Arktik-Avto LLC

Russia · both reports dated 10.10.2003

PRODUCT

XADO revitalizant gel
for petrol engines · added
without dismantling the unit

TEST OBJECT

Petrol engines of two
vehicles
UAZ-3962, plate No. E 294 VR
51 · VAZ-21093, plate No. E 935
VR 51

DOCUMENT TYPE

Two company reports
with signatures and seals

VEHICLE	CONDITION AT START	WHAT WAS MEASURED	REPORT DATE
UAZ-3962 plate No. E 294 VR 51	built 1994 , 9 years in service	Compression in each of the four cylinders before and after treatment	10.10.2003
VAZ-21093 plate No. E 935 VR 51	built 2000 , about 3 years in service	Compression in each of the four cylinders before and after treatment	10.10.2003

Both vehicles came from the fleet's regular service. The engines were treated with XADO revitalizant gel for petrol engines, without dismantling.

What repeated on both engines

compression evened out across the cylinders

↑ **25-65.3 %**

compression per cylinder, 4.9-5.4 → 8.1-8.2 on the UAZ
and 8-10 → 12-12.5 on the VAZ

Compression per cylinder — both engines

VEHICLE	CYLINDER	BEFORE	AFTER	CHANGE
UAZ-3962, E 294 VR 51	No. 1	5	8.2	+64 %
UAZ-3962, E 294 VR 51	No. 2	5.1	8.2	+61 %
UAZ-3962, E 294 VR 51	No. 3	5.4	8.2	+52 %
UAZ-3962, E 294 VR 51	No. 4	4.9	8.1	+65 %
VAZ-21093, E 935 VR 51	No. 1	9.5	12	+26 %
VAZ-21093, E 935 VR 51	No. 2	10	12.5	+25 %
VAZ-21093, E 935 VR 51	No. 3	10	12.5	+25 %
VAZ-21093, E 935 VR 51	No. 4	8	12	+50 %

Compression is given exactly as recorded in the reports: the documents do not name the unit of measurement, so the change is expressed as a percentage.

Cylinder evening-out — both engines

VEHICLE	COMPRESSION BEFORE	COMPRESSION AFTER	SPREAD BETWEEN CYLINDERS
UAZ-3962, E 294 VR 51	4.9-5.4	8.1-8.2	0.5 → 0.1
VAZ-21093, E 935 VR 51	8-10	12-12.5	2.0 → 0.5

The spread is the difference between the strongest and the weakest cylinder. The weakest cylinders gained the most: 4.9 → 8.1 and 8 → 12.

Conclusion from the two reports

Compression rose in every one of the eight cylinders of both vehicles, and most of all in the weakest ones: **4.9 → 8.1** on the UAZ-3962 and **8 → 12** on the VAZ-21093.

Compression physically cannot rise above the manufacturer's rated value, so all cylinders reaching one and the same figure means restored sealing of the cylinder-piston group — the maximum attainable, not a random gain. The spread between cylinders shrank from **2.0** to **0.5** and from **0.5** to **0.1**: the engine begins to run evenly. Both reports record the same findings: "engine vibration decreased, pulling power and throttle response improved, oil pressure and idle speed increased", "Fuel consumption decreased". These assessments are stated in words in the reports; compression is the figure that was recorded numerically.



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The results relate to the four-cylinder petrol engines of UAZ-3962 and VAZ-21093 vehicles in a fleet's regular service; on other equipment and under other conditions the figures may differ. The originals of both reports, with signatures and seals, are published in full and available for download.