XADO RVS IMPLEMENTATION REPORT · JANUARY 1997

Mixed-brand fleet: compression gain instead of reboring and new rings

KharP JSC, motor transport shop · approved by: Vice-President — Chief Engineer A. V. Bokov · signed by: head of the motor transport shop I. P. Kolyshkin, shop mechanic N. I. Lukyanov, mechanical engineer of the Chief Mechanic's Department V. G. Tsyupka

Ukraine · treatment and measurements 10–11.01.1997 · signed and stamped report

PRODUCT

XADO RVS

engine treatment on vehicles in service

TEST OBJECT

Nine fleet vehicles

Moskvich · RAF · two UAZ · KAMAZ · two VAZ 2106 · GAZ 2410 · GAZ 31029

DOCUMENT TYPE

Implementation report signed and stamped

VEHICLE	CLASS	WHAT WAS MEASURED
Moskvich No. 7402	passenger car	compression, 4 cylinders
RAF No. 8675	minibus	compression
UAZ No. 2117	off-road vehicle	compression, 4 cylinders
UAZ No. 4727	off-road vehicle	compression, 4 cylinders
KAMAZ No. 2178	truck	oil pressure in the lubrication system
VAZ 2106 No. 2963	passenger car	compression, 4 cylinders
VAZ 2106 No. 2964	passenger car	compression, 4 cylinders
GAZ 2410 No. 2032	passenger car	compression, 4 cylinders
GAZ 31029, 343MO	passenger car	compression, 4 cylinders

All vehicles were taken from the fleet's current service; treatment and control measurements were carried out on 10–11 January 1997.

Key results

↑ 0.5-2 kgf/cm²

compression across cylinders, 7-10 → 7.5-12 kgf/cm²

Compression across cylinders, kgf/cm²

VEHICLE	BEFORE TREATMENT	AFTER TREATMENT
Moskvich No. 7402	9 · 9 · 9 · 9	10 · 10 · 10 · 10
RAF No. 8675	10 · 10	12 · 12
UAZ No. 2117	8 · 7 · 8 · 8	10 · 9 · 10 · 9
UAZ No. 4727	7 · 7 · 7 · 7	7.5 · 7.5 · 7.5 · 7.5
VAZ 2106 No. 2963	9 · 10 · 9 · 10	10 · 10 · 10 · 10
VAZ 2106 No. 2964	10 · 10 · 9 · 10	10.5 · 11 · 10 · 10.5
GAZ 2410 No. 2032	8 · 8 · 8 · 8	9 · 9 · 9.5 · 9
GAZ 31029, 343MO	8 · 8 · 8 · 8	9 · 9 · 9 · 9

Compression does not rise above the engine's factory rating: bringing every cylinder to the same value is the maximum achievable result.

Lubrication system — KAMAZ No. 2178

PARAMETER	BEFORE TREATMENT	AFTER TREATMENT
Oil pressure, kgf/cm²	3	3.5

Higher pressure means restored clearances in the lubrication system: the pump holds pressure again.

Commission's conclusion

The commission of KharP JSC — the head of the motor transport shop, the shop mechanic and the mechanical engineer of the Chief Mechanic's Department — recorded in the report: «The test result showed that engine compression increased on average by **0.5 unit to 2 units**, which eliminates the need to disassemble the engines, rebore the blocks, and replace pistons, piston rings and bearing shells». The report was approved by the Vice-President — Chief Engineer of the enterprise. Worn engines went into treatment: **7-10 kgf/cm²** across the cylinders. The gain was recorded on all eight vehicles where compression was measured — from the Moskvich and VAZ to UAZ, GAZ and RAF. On VAZ 2106 No. 2963 all four cylinders reached **10 kgf/cm²**: compression does not rise above the rated value, so such levelling is the limit of what is achievable. On KAMAZ No. 2178 the oil pressure in the lubrication system increased.

XADO

The results apply to the listed vehicles of the KharP JSC fleet and to their operating conditions; on other equipment the figures may differ. RVS is an obsolete XADO designation, the zero-generation compounds; the current generation of products is revitalizants. The original signed and stamped report is published in full and available for download.