



TREATMENT REPORT ON A MUNICIPAL FLEET BUS · ISRAEL, 2005

MAN city bus: worn diesel regained compression, no teardown

O.D.A.X LTD, XADO representative in Israel · Mordechai Baycher · municipal fleet bus
Israel · baseline measurement before 09.01.2005 · treatment 06.02–16.02.2005 · check measurement
01.03.2005

PRODUCT	TEST OBJECT	DOCUMENT TYPE
XADO compound three-stage treatment over ten days, without taking the vehicle out of service	MAN - 202 bus diesel engine, 6 cylinders, 141 hp · mileage 412 213 km	Report by the XADO representative in Israel O.D.A.X LTD · company seal impression

VEHICLE	MILEAGE AT START OF TRIAL	WHAT WAS MEASURED
MAN - 202 bus, 6-cylinder diesel, 141 hp	412 213 km	Compression in each of the six cylinders, bar

The bus comes from a municipal fleet of 120 vehicles (per the report). All three treatment stages fit within {{810 km}} of running — the vehicle stayed on its route.

Key results

compression evened out across the cylinders

↑ **7.7-25 %**

compression by cylinder, 22-26 → 27.5-28 bar

Compression by cylinder — before and after treatment

CYLINDER	BEFORE, BAR	AFTER, BAR	CHANGE
1	25	28	+3 bar
2	25	28	+3 bar
3	25	28	+3 bar
4 — weakest	22	27.5	+5.5 bar
5	25	28	+3 bar
6	26	28	+2 bar
Spread across cylinders	4	0.5	-3.5 bar

Baseline measurement taken 09.01.2005, control measurement 01.03.2005, 13 days after the third stage. All six cylinders reached **27.5-28 bar**.

What this means

The engine came to treatment with **412 213 km** on the clock and sagging compression: the weakest, fourth cylinder held **22 bar** against **26 bar** in the strongest. A spread of **4 bar** is a sign of a worn cylinder-piston group: the engine runs unevenly and loses power. The three treatment stages took ten days, and the bus stayed on its route throughout — between the first and the last stage it covered **810 km**. The control measurement gave **27.5-28 bar** across all six cylinders: the weakest gained **5.5 bar**, and the spread narrowed to **0.5 bar**. Even compression means the sealing of the cylinder-piston group has been restored, and it cannot rise above the factory nominal: bringing every cylinder to one level is the maximum achievable. Obtained without dismantling the engine, on a vehicle in normal service.

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The results apply to the diesel engine of a MAN - 202 bus with over 412 000 km of mileage; on other equipment and with a different condition of the components the figures may differ. The treatment was carried out and the result reported by the XADO representative in Israel — O.D.A.X LTD. The original document is published in full and available for download.