P4 MODIFIED

OPEL REKORD 2·1

* Using some stray components and his own skill, a young wool farmer produces an Opel Rekord extraordinary . . .

A CAR ROAD TEST

FEW modern motoring enthusiasts do much modification work themselves, in these days when such a wide range of goodies is offered in convenient package form by tuning shops in every centre — with results reasonably guaranteed.

But as little as 10 or 15 years ago, modification kits were almost unknown, and men with a feeling for machinery rolled up their sleeves and experimented for themselves. Many of them became national heroes on race tracks in hairy, overpowered specials which gave spectators the kind of thrills which have become rare in a more streamlined age.

FARMER HOBBYIST

The spirit of the pioneers lingers on. The tuning shops they inspired have taken over and the standard of car modification is sophisticated and successful.

However, here and there are still pure hobbyists who lovingly work on their own cars, and one such is Theo Oosthuizen, 34-year-old bachelor farmer from Prince Albert, Cape.

CAR has moved with the times and rarely features privately-modified cars these days, but we were happy to accept when Mr. Oosthuizen called in to introduce us to his quite exceptional Opel Rekord.

"SCRATCHING THE SURFACE"

Interested in cars since his youth — "I have been tinkering with them since I learnt to walk" — he has developed a well-equipped workshop on the Oosthuizen sheep farm. He also has a passion for the Opel Rekord, and feels it is neglected tuning-wise.

"I have used some Triumph TR3 spares and a few home-made parts, with one or two purchases, and this elementary tuning has produced good results", he told us modestly. "But this is just scratching the surface — this big, five-main-bearing engine has lots of potential."

OWN DESIGNS

Mr. Oosthuizen bought his P4 Rekord last year — it has now done 23,800 miles — and started modifying it at 7,000, when he skimmed 80 thou. off the cylinder head to raise compression ratio to 8·4 to 1, approximately. This felt good, so in stages he went further.

He had some Triumph TR3 spares lying around on the farm, so he prepared a pair of SU carburettors ("Still one of the best — that is why Triumph, Volvo and BMC use them,") and made up balanced inlet manifolds for them, having the welding done by a local engineering works.

Next came the exhaust side, and here, too, he made up a free-flow system of his own design, without tuned lengths, and had it welded up.

SOLID LIFTERS

He fitted a camshaft supplied by Superformance, Johannesburg, and to use the revs. which this made available, converted from hydraulic to solid valve lifters, and lightened the flywheel by about 4 lb.

A free-flow silencer was made up from an old TR3 unit, and final stage was to drop the rear suspension slightly to lower the centre of gravity, and fit Goodyear G-800 radial ply tyres, using widerim wheels at rear to make the tail stick better on dirt roads.

click here for page 2

★

The twin SU's with home-made oil impregnated foam-filled aircleaners, and owner designed manifolding.

SPECIFICATIONS

TEST CAR:

Make . . . . . Opel
Model . . . . . P4 Rekord 2·1-litre
Modifications . . . . . Owner

CONVERSION DETAILS

ENGINE:

Compression ratio . . Raised to 8·4 to 1
Camshaft . . . . High-efficiency
Carburettors . . . . . Twin SU
Inlet manifolds . . Free-flow, balanced
Exhaust manifold . Free-flow, not tuned
Exhaust . . Remodelled Triumph TR3
Flywheel . . . . . Lightened 4 lb.
Valve lifters . . . . . Solid lifters
Spark plugs . . . . One stage cooler
Ignition coil . . . . . Lucas

TRANSMISSION:

Clutch . . . Adapted Chevelle unit

SUSPENSION:

Rear springs . . . . Lowered slightly
Shock absorbers . . . . . Koni
Front wheels . . . . . Standard
Rear wheels . . . . 5½-in. widerim
Tyres . . . . 175 x 13 Goodyear G-800

CONVERSION COSTS

OWNER'S ESTIMATE:

Less than R100 in actual expenditure. Many parts were made up cheaply or salvaged from other vehicles.

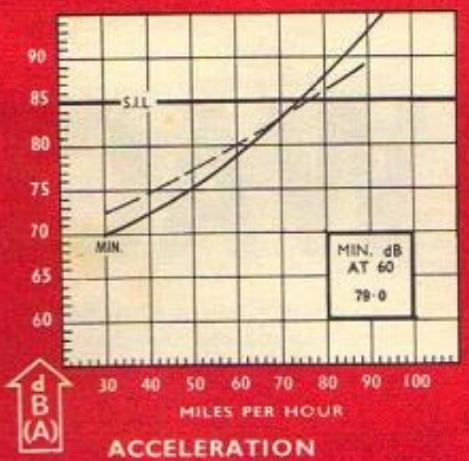
TEST CONDITIONS:

Altitude . . . Sea level (both Tests)
Weather . . Fine and mild (both Tests)

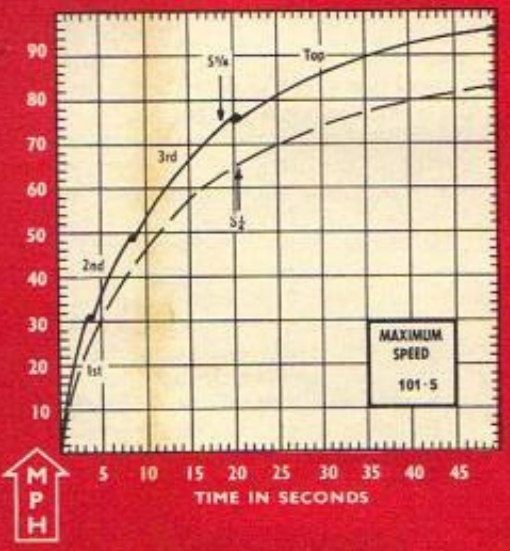
PROVIDED TEST CAR:

Theo. Oosthuizen, Esq., of Prince Albert, Cape.

INTERIOR NOISE LEVEL



ACCELERATION



PERFORMANCE

The following tables and graphs compare the performance of the Opel Rekord 2·1, as modified by Mr. Theo. Oosthuizen (solid lines) with that of the standard car (CAR Road Test, April, 1966, broken lines):

MIN. INTERIOR NOISE LEVELS:

	Standard	Modified
Idling	54·0	57·0
30 m.p.h.	72·5	78·0
45 m.p.h.	76·0	77·0
60 m.p.h.	82·0	79·0
Max.	89·0	See graph

(Minimum levels in decibels A weighting, with car closed, at steady true speeds.)

ACCELERATION FROM REST:

0–30	4·9	3·7
0–40	7·5	6·1
0–50	11·6	8·6
0–60	16·5	12·0
0–70	25·8	16·5
¼ Mile	20·4	18·3

ACCELERATION IN 3RD GEAR:

20–40	6·9	7·3
30–50	6·7	7·1
40–60	8·3	6·9
50–70	—	7·6

ACCELERATION IN TOP GEAR:

20–40	9·6	—
30–50	9·6	10·9
40–60	10·4	10·6
50–70	13·3	10·7

(Measured in seconds, to true speeds, averaging runs both ways, car carrying Test crew of two and their equipment.)

MAXIMUM SPEED:

True speed	89·1	101·5
Speedo reading	91·0	110·0

(Based on corrected rev.-counter readings done during 1966.)

FUEL CONSUMPTION:
Not measured — see text.

GEARED SPEEDS:

1st gear	23·8	30·5
2nd gear	37·4	48·4
3rd gear	59·8	76·1
Top gear	81·2	103·2

(Calculated to true speeds at engine peak r.p.m.: 4,400 on standard car, 5,600 on modified car.)

He also fitted Koni shock absorbers, but said they made little difference, and on the electrical side, fitted one stage cooler plugs and a standard Lucas coil (not sports) in place of the standard Delco-Remy.

Quite incidentally, he had clutch failure (all his pals insisted on trying the car out, and were not very gentle) so he replaced with a heavier-sprung Chevelle unit, which takes the extra power very well.

PERFORMANCE

The car goes to 6,000 r.p.m. easily, but the engine peaks at about 5,600, and this extra range has made it slightly over-geared.

Using 5,600 on Test, we recorded sparkling acceleration times (0–60 in 12 sec. flat is about the capability of the 1·9-litre, o.h.c. TS model sold in Germany) though the penality is loss of torque at lower speeds, as reflected in the tables alongside.

Torque comes in with a whoosh at about 3,000 r.p.m., but as the range in the gears is so much greater (up to 75 in 3rd, for instance) spanking performance is available at any speed.

ECONOMY AND SPEED

This was a quick Test, so we did not do fuel metering, but the owner informs us that he is getting about 22 m.p.g. average, driving hard most of the time. This is slightly better than the economy in standard form, using all the steam the engine puts out.

We base a rather conservative maximum speed of 101·5 on confirmed and calibrated rev.-counter readings which he made on the open road before the general speed limit came into force on January 1, at an altitude of 2,000 ft.

Well set up under Test conditions at sea level, there is little doubt that the car's ultimate could be improved.

SUMMARY

With the improved roadholding given it by small modifications and the radial-ply tyres (Mr. Oosthuizen says the G-800's are giving him the best tyre mileage he has had so far, though the tread blocks have developed chipped edges at 8,000 miles on predominantly dirt roads) the disc-braked Opel Rekord is safe and satisfying to drive.

We congratulate an enterprising private owner on some interesting and well-balanced development work, which has made him the proud possessor of what is a quite singular car. •