

Reprinted from "The Motor," August 6, 1947

# THE 2.4-LITRE HEALEY

## A Policy Justified

*"There can be no good speaking without sound thinking; consequently devotion to true eloquence implies devotion to sound thinking."*

Cicero.

A weekly journal can follow one of two policies. It can be completely objective, impartial, acting simply as a recorder of facts and of events, or it can be written with belief in certain causes which it makes every endeavour to foster.

The tradition of "The Motor" has resided in the latter course.

In the early days of motoring the paper fought passionately for the rights of the private motorist on the King's highway, for improved roads, home-produced fuel; against anti-motoring prejudice, restrictive taxation, and the inertia of Government departments.

In more recent years, with growing technical interest in motorcars, the paper has lent unqualified support to the introduction of front-wheel brakes, independent suspension systems and improved transmissions, including two-pedal control.

In the past decade, the importance of true streamlining and the benefits that are to be derived from scientific body design have been the subject of a large number of articles, and some specialized studies in these directions were published during the war. For this reason the introduction in 1946 of a wind-tunnel tested car, the Healey, was enthusiastically welcomed, and before the car had been tried on the road, our technical staff estimated the maximum speed at 105 m.p.h.

It is well known that at the end of 1946 the road test of this car included a section of road in Italy timed by the Milan Club and observed by "The Motor" editorial staff, and that on this occasion a maximum speed of 104.65 m.p.h. and a mean speed of 103.46 m.p.h. over the kilometre were recorded.

Agreement with theoretical prediction and road performance could scarcely be closer; in fact their very coincidence gave rise, in some quarters, to doubt. In particular many wondered whether the startlingly good figures were the result of using fuel considerably better than that obtainable by Metropolitan motorists.

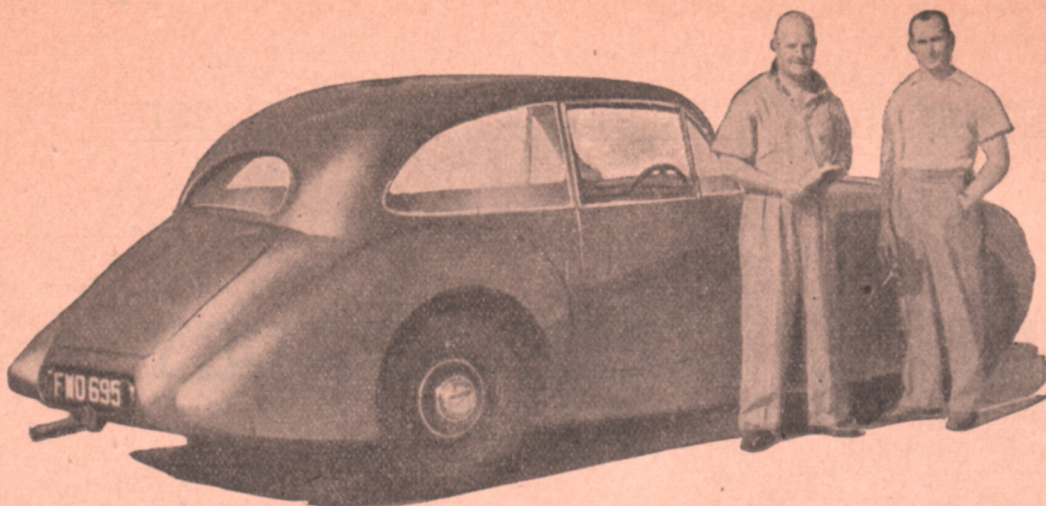
Such doubts will be completely put to rest by the remarkable figures recorded by this same make of car in Belgium recently. The engine was certified as standard product by the R.A.C., including compression ratio at 6.9:1. The fuel was certified by a Belgian club to have an octane value not exceeding 72, and to be identical to that relayed through Belgian pumps. It is, on these figures, as nearly as possible equal to British Pool petrol.

With practically no prior preparation, the car was driven at a maximum recorded speed of 111.8 m.p.h. over a kilometre, followed a few days after by 107 m.p.h. over five miles: it was then driven direct to a Concours d'Elegance in which it won its class. No car can have added as much to British prestige abroad in so short a time as has the Healey by these brilliant performances.

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**SUCCESSFUL TEAM—**  
Donald Healey (left)  
and Roger Menadue,  
of the Healey experi-  
mental staff, look  
justifiably pleased as  
they pose beside the  
2½-litre saloon after  
the speed tests.

**I**N January, 1946, when details of the Healey were being prepared for publication, Technical Editor Pomeroy shut himself in his office, wedged his monocle firmly in place and got busy with a slide rule on the facts available regarding power curves, frontal area and drag coefficient (reliable figures for which were, fortunately, available from wind-tunnel tests with a model).

When he emerged a little later, the monocle was dangling at the end of its string and the predictions which he made caused quite a stir in the editorial circle. They caused an even greater stir when, in due course, they were included in the description of the new model in "The Motor" on January 16. But predictions of outstanding performance have been made before, and, monacle or not, these particular figures remained to be realized in practice; which is not always quite the same thing.

Towards the end of the year, the opportunity arose for the Editor to take a saloon model to the Continent for test, "G.B." plates being an essential part of the test apparatus, since this country no longer possesses a spot suitable for trying out potential 100-m.p.h. cars under maximum speed conditions. The results of these tests (which appeared in "The Motor" of December 4, 1946) were quite as remarkable as to the predictions, and, in fact, tallied with them to a remarkable degree. In particular, the maximum speed obtained agreed to within a mile an hour of the prediction of a probable 105 m.p.h.

Two sets of figures were obtained. The first, recorded by "The Motor" staff, gave a mean for the kilometre of 104.14 m.p.h., with a best run at 106.65 m.p.h. In view, however, of the fact that a small error in timing at these speeds can make an appreciable difference in the result, coupled with the possibility of the timing apparatus having become deranged in the course of a strenuous journey across Europe to the Milan-Como Autostrada, the co-operation of the Milan Automobile Club was sought, and the runs were repeated the following day. On this occasion there was no wind (compared with a moderate breeze the previous day), and the mean of four runs worked out at 103.46 m.p.h., with a best run at 104.65 m.p.h., the latter figure, interestingly enough, tallying almost exactly with the previous day's mean speed.

These results were obtained on Swiss petrol, and this has led to considerable speculation in some quarters as to whether the car could put up equally good figures on the sort of petrol more normally available to British motorists. An opportunity to end this speculation arose on July 24, when Lt.-Col. A. T. Goldie Gardner

## 110 M.P.H. on

and the Royal Automobile Club de Belgique co-operated by placing the Jabbeke-Aeltre highway at Donald Healey's disposal following the successful record attempts of Gardner and Lurani. It was arranged that Healey's run should be officially timed by the Belgian club, thus ensuring the authenticity of the speeds.

Two other important facts remained to be established, however. One was that the production model to be used was, in fact, of normal engine size and compression ratio. The other concerned the fuel, which was to be the standard Belgian pump grade.

So far as the first point was concerned, the R.A.C. agreed to measure the engine dimensions and compression ratio, and I arrived at the Club on Wednesday, July 23, to find Mr. Hudlass, of the R.A.C. technical department, completing the sealing of the engine after measurement. A certificate was then issued, including details of the engine dimensions and compression ratio and also details of the sealing for the information of the Belgian Club. The measurements stated on the certificate disclosed the engine size to be 80.5 mm. and 120 mm. bore and stroke (2,443 c.c.), and the compression ratio to be 6.975 to 1.

### Little Time to Spare

Owing to heavy bookings on the Dover-Ostend passenger line, the car had to be sent by cargo boat from Tilbury, and I therefore left Healey and took the passenger steamer in order to be sure of reaching the Jabbeke-Aeltre motorway by dawn the following morning to witness the Gardner and Lurani record attempts.

Donald Healey did not arrive until much later in the morning owing to shipping and Customs delays, and by the time he had filled up with Belgian pump petrol and arrived at the record stretch, the racing cars had almost completed their runs and he was asked by the time-keepers to be ready with the Healey immediately after lunch.

This gave very little time for checking over the car and making sure that carburation was suited to the Belgian pump fuel and the hot weather. Healey managed, however, to put in a few trial runs which established the desirability of a slightly enriched carburettor setting (actually achieved by the use of No. 6 needles for the S.U. carburettors in place of the No. 5 needles normally employed), and also revealed the fact that the gear



# Healey Saloon Puts Up Remarkable Speeds in Belgium on Pump Fuel with a Certified Compression Ratio of 6.975 to 1

By H. C. Hastings

ratios with standard wheels and tyres (5.75 by 15) were entirely suited for the job in hand. Actually Healey had with him a pair of oversize wheels and tyres (5.75 by 16), but these showed no advantage.

In the afternoon, therefore, Healey presented himself to the timekeepers, engine seals were examined, and he got straight on with the job.

The first run over the kilometre gave a time of 20.39 secs., improved fractionally on the second run to 20.33 secs., giving a mean speed of 176.557 k.p.h. (which works out at 109.7 m.p.h.). For the mile runs, the respective figures were 32.48 secs. and 32.18 secs., giving

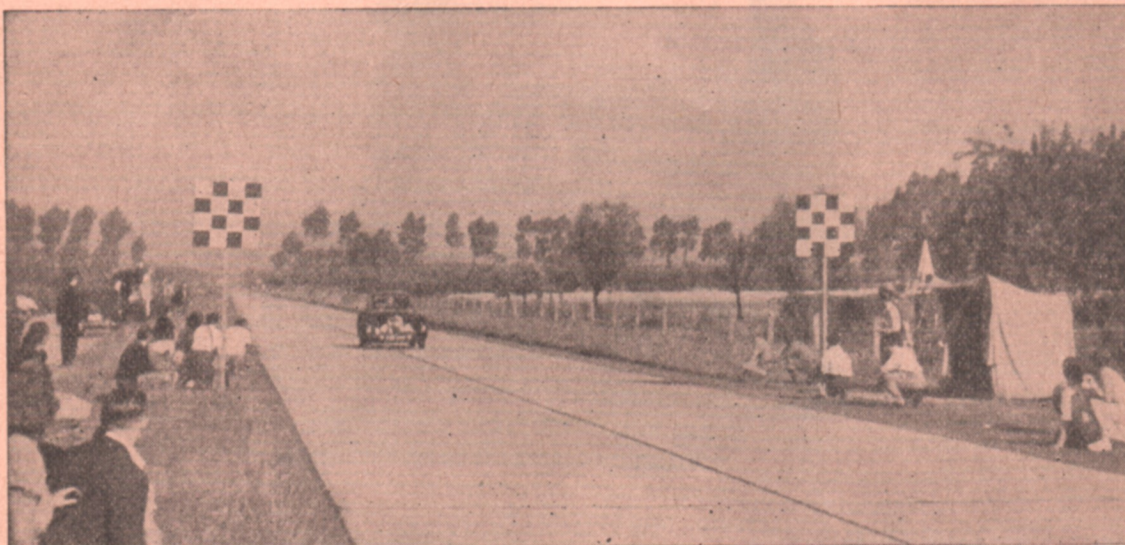
On the Sunday morning, Healey duly presented himself as soon as the course was cleared, proceeded on a warming-up run, and turned round at the far end ready for his attempt, only to be told by an agitated gendarme that he could not use the road as record attempts were just about to take place! Rather a nice commentary on the comfortable appearance of the car.

I watched these attempts from one end of the measured kilometre (the Belgian Club would not allow a passenger).

The figures set up were, in some ways, even more remarkable than the previous Thursday's efforts, with 5 kiloms. at 172.711 k.p.h. (107.312 m.p.h.) and 5 miles at 172.419 k.p.h. (107.136 m.p.h.). As soon as all this was over, the car was run up for a standing kilometre, which was achieved at a mean speed of 109.09 k.p.h. (67.78 m.p.h.), whilst the standing mile was covered at a mean

## PUMP PETROL

111.87 M.P.H.—The Healey flashes past the timekeepers at the conclusion of its fastest sprint.



a mean speed of 178.374 k.p.h. (110.8 m.p.h.). Fastest one-way run was over the mile—at 111.87 m.p.h.

These really remarkable figures are, it will be noticed, even better than those achieved on Swiss petrol in Italy. The explanation lies in the fact that the Jabbeke-Aeltre motorway, which gives a total run of over 14 kiloms. and has the nearest approach to a perfect surface of any road I know, is vastly superior to the Milan-Como stretch, where the previous tests were made—a fact which was confirmed by Count Lurani.

After the runs, a sample of the fuel was taken by the Belgian Automobile Club, and Healey proceeded back to the Grand Hotel Osborne, Ostend, with the satisfied grin that comes from reaching more than target performance.

That should have ended the proceedings, but, in the evening, Gardner announced his intention of having a crack at doing even better with the Gardner Special the following Sunday morning. That led to the suggestion that Healey should follow him again with the idea of establishing local Belgian sports car records in the 3-litre over the five kilometres and five miles, his performances in the morning already ranking as local Belgian sports-car class records for the flying kilometre and mile.

speed of no less than 124.09 k.p.h. (77.785 m.p.h.).

For these Sunday morning runs Healey used the larger (16-in.) wheels simply to give the engine a slightly easier time (to the extent of approximately 400 r.p.m.) on its flat-out run of approximately 7 miles in each direction, although the slightly higher effective gearing obtained was a handicap on the standing-start runs.

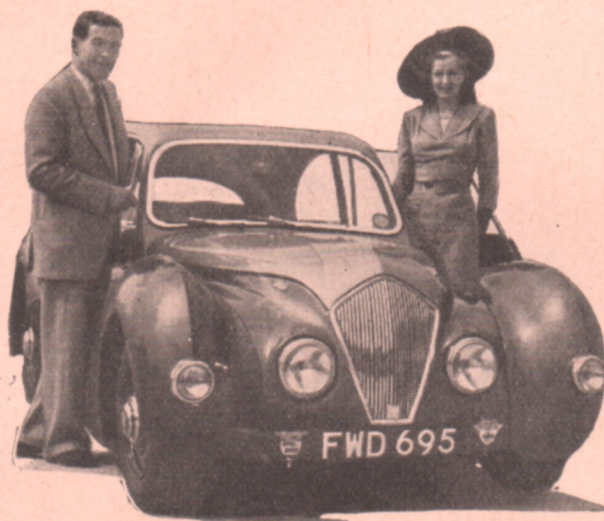
All the figures quoted are, of course, subject to official confirmation, and so is the result of the fuel test, which showed an octane value of between 70 and 72. When this confirmation is received from the Belgian Club, Donald Healey will be in possession of official figures to substantiate his belief that the Healey is the fastest production car at present manufactured in the world.

One final word. I motored back to Ostend with Healey immediately after the timed runs, and, three up, we held 110 m.p.h. in perfect comfort for some distance. In the afternoon, the car was put in the Concours d'Elegance and won its class. The following day, we crossed to England and I drove it to London. After what has already been recorded, it would be sheer bathos to praise its performance. But it is not out of place to add that I found it as tractable in traffic as any family saloon.



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## OSTEND CONCOURS



Straight from its speed tests, the 2½-litre Healey saloon won the Coupe du Royal Automobile Club de Belgique for closed cars between two and three litres.