

THE ALPINE EAGLE AS A TOURING CAR

Being some experience of the Rolls-Royce that triumphed in the Austrian Alpine Test as a motor carriage for home service.

By H MASSAC

BUIST

For the second year in succession Rolls-Royce have given the world's motor constructors food for thought by reason of the nature of the car's performance in the arduous Austrian Alpine touring competition, concerning which readers of THE MOTOR WORLD have been very fully informed. The fact that this year the Rolls-Royce made the outstanding performance of all the competitors by reason of supplementing the necessary proofs of reliability in the guise of achieving non-stop runs with making the fastest times up the mountains, has naturally given occasion for some inquiry as to whether or not this is a highly specialised car, such as bears no direct relationship to the standard product supplied to the public. Feeling that the best way to answer this question in satisfactory fashion was to examine the vehicle, and follow up that process by trying it under the same conditions as you would run the standard product, I seized an opportunity over this weekend to make a tour of some 588 miles on the "Alpine Eagle", as the triumphant Rolls-Royce has been aptly styled. In the result I was extraordinarily impressed with what might be called the versatility of this car. While it plainly surpassed the Rolls-Royces, as we have come to know them, in the matter of its surprising power and speed, nevertheless those qualities proved merely supplementary to the ordinary Rolls-Royce features of refinement, which have not been sacrificed in any way, but which have instead been incorporated with those necessary qualities to enable the vehicle to carry British colours to the very forefront in a competition of the most thoroughly representative international character.

Features of the Car

The car itself scales light, not that the chassis weighs less than the standard product, but because the four-seated touring body is a mere streamline shell, weighing little more than 3cwt. The fact that part of the routes embraced in the Austrian trial were highways of exceedingly indifferent surface, and that many such passages had nevertheless to be travelled at high speed to make good times in the matter of hill climbing, caused the chassis, despite the lightness of its body, to be equipped with limousine springs to make the suspension sufficiently hard for the purpose of achieving speed. Thus to this extent the machine is not as smooth in suspension as the standard product, because it has proportionately a lighter body and stiffer springs. But when you get it going at the high speeds of which it is capable, you realise the purpose of this, particularly if the road is a poor one, because then you travel very fast in an extraordinarily smooth manner. It is only when going very slowly in town, over smooth roads, that it dawns on you that, for a Rolls-Royce, this car is stiffer in the springs than ordinary, albeit the suspension is such as to deserve high praise, were it not for the fact that the firm itself has set higher standard(s) for this work. You will, therefore, observe that in this mere stiffening of the springs, substituting one set of standard steel leaves for another, there is nothing in the product as used for one competition which is not as supplied in the standard vehicle. For example, if for home service you

fitted a limousine body to this chassis with limousine springs, your proportion in this connection would be precisely as in standard Rolls-Royce practice today.

Departures from Current Practice

For the rest, the machine is a standard product, even to the engine dimensions, but the cams give a bigger lift to the valves, and the moving parts of the motor are somewhat lightened, with the result that there is a higher compression and a higher range of engine speed. The standard Rolls-Royce gives its best torque at 1,900 turns of the crankshaft a minute, whereas the "Alpine Eagles" gives its maximum power at 2,300 revolutions a minute. There are, besides, on the dashboard one or two "gadgets" not needed for ordinary touring, but necessitated by the particular regulations for this test, as, for example, means, without getting out of the driver's seat, of switching over from one petrol tank to another for the journeys were long, and replenishment of supplies was effected as seldom as possible. There are also a few little taps and things to enable the motor to be started up easily should the car be above the snow line. You are to understand that the Alpine test was a sealed bonnet competition, so that no opportunities were provided to "tickle the carburettor" to assist in starting and so forth. None of these devices, however, are necessary for the home service, yet none of them are freak schemes. On the contrary, all of them are eminently desirable for the service of the motorist using the Rolls-Royce regularly in such parts of the world as those in which the Alpine trial took place. I dwell at this length on this phase of the matter because, for all that has been written about the Austrian Alpine Trial, little or nothing in the way of description of the features of the cars that have been triumphant has been published.

In Civilised Life

Realising from the features specified, therefore, that here is a machine submitted to competition in a manner in which it is needed by the public, and which departs from the standard product only in the trifling details mentioned – which departures, moreover, are all suitable for standardising absolutely in an Alpine model – I wanted to put the motor to the test, and see whether or not, supposing such a model to be in the hands of Rolls-Royce patrons abroad, it would at the same time and without alteration, be suitable for service at home. For one thing, the extent to which it would be suitable would reveal the flexibility and adaptability of the machine. In the Austrian trial, in the manner so popular abroad, the car was run in what is for Rolls-Royce comparatively unsilenced condition, whereas on being brought back to this country, a silencer was fitted, therefore we went about the country like reasonable citizens. In our trial there was to be no adjustment of the carburettor to suit hills when we came to them, or traffic when we found ourselves among such conditions, in that the chief point was to arrive at flexibility. Therefore we started by driving into London and out of it through the **ten miles limit** areas in a westerly direction on to the Bath Road, being careful to observe all speed limits in this connection.

Acceleration Without Vibration

The first thing I observed was that we were doing all this work, coming almost to a standstill in traffic, then accelerating, without any slipping or manoeuvring of the clutch, in a manner which was as handy as with the standard Rolls-Royce. I could not but think what an extraordinary contrast this was with certain high-powered "sporting" and "Alpine" models of cars which, when I had tried them also under home conditions in this fashion, had required to be driven on a low speed whenever we came to a village, far less London tramway areas, the engines being so little flexible that you could not possibly go through even comparatively fast, ignoring local speed regulations, on the through drive, or you would be stopping your engine pretty soon. In town the only difference between this and the standard car was in the matter of acceleration whenever traffic opened up ahead. We seemed to take the least possible time in getting the car from one rate of travel to the desired speed. Nor under these circumstances was there any stuttering of the carburettor or vibration of the engine or transmission. This was only the beginning of our initiation to a constructional achievement that is remarkable in my experience of the modern high compression, quick acceleration engines, which nearly always vibrate considerably. With the Rolls-Royce you might have been driving a standard motor as regards smoothness of the working of the engine.

On the Bath Road

Our next stretch was along the historic Bath Road, which furnishes another contrast with the Austrian Alpine conditions in that for the most part it provides level going and, in any case, always good surfaces.

One point, however, is that there are plenty of villages to pass through, also any number of cross turnings. The idea, therefore, was to reveal what sort of average we could make by driving with consideration and merely by saving time on the acceleration in regaining any desired rate of travel, so that there should be no "blinding" across blank turnings or dashing through village streets. The "Alpine Eagle" travels along as smoothly at forty miles an hour as the ordinary first-class touring car does at twenty miles an hour. The "Alpine Eagle", moreover, is as absolutely under control at the faster speed, for you could pull it up in the same distance as the other vehicle going at half that speed. Indeed, I have here a suggestion to make to the Rolls-Royce firm – namely, that they might carry out some interesting official tests as to the distances in which the machine can be pulled up at different rates of speed, the idea striking me more particularly when, later in the tour, we tried the brakes on some very poor and wet surfaces, where roads proper had never been built, on Exmoor. The car we were on was, of course, at a disadvantage for the purpose of proving the brakes to their maximum, in that the weight of it was so very light, therefore the behaviour of the brakes was penalised to that extent. Yet it is impossible to feel greater confidence in any vehicle than is inspired by the manner in which the brakes act with this one. It reveals the designers to have grasped the fundamental point that, as you improve your engine, so also you must improve your braking efficiency if you are to keep the two essential features of your car in proportion, and to provide a vehicle

that is not only capable of fast travel, but which is also a safe machine to handle under those conditions.

Power Without Coarseness

Of course, as we know from the Austrian performance on the flat, the machine can do well over four-score miles an hour. But a point of even greater merit is the brief distance in which it can accelerate to any speed up to its maximum. I have ridden, years ago, in racing cars with engines certainly as powerful as this. But in every case the racing cars have been to an extent coarse in the manner of their acceleration; you have felt a “punch” in the back, sometimes several. Not so with the Rolls-Royce, however. It glides away in a manner that is utterly deceptive. You never receive a “punch” or a jerk; yet you progress from one rate of travel to another with a minimum loss of time. This, of course, is due in large measure to the splendid balance of the six-cylinder motor and extraordinary smoothness of the transmission mechanism, as well as the substantial nature of the chassis, which has been achieved without putting up the weight. The long wheel-base, the comparatively small wheels, and the low centre of gravity combine to produce a car of extraordinary stability, a quality which is more abundantly manifest when on open heathlands or elsewhere, we begin to make sharp turns at proportionately fast speed to test whether or not there is any tendency to skid or for the car to lurch. Under these circumstances the Rolls-Royce holds the road, and keeps an even keel in an extraordinary way.

Up Porlock and Across Exmoor

We went westerly through Bath into Minehead, and so to Porlock, where we paused at the Ship Inn for luncheon, leaving the radiator facing the forking of the ways. On the right-hand was the toll gate to the motor road that has been built to obviate the ascent of the traditionally dreaded rise; to the left was Porlock Hill as made by man before motors were. When we got going on Porlock – which is doubtless in the first class as regards formidable gradients, as well as in providing difficult going for any machine of long wheel base like this, and where the surface is none too solid – we found nevertheless that the only thing necessary was to keep turning the steering wheel. We made the ascent up the severe side of Porlock, which is now a comparatively rarely used thoroughfare, therefore the going proved clear. There are one or two sharp turns in it, but these presented absolutely no difficulties to the Rolls-Royce steering lock, the car going round them at an extraordinarily high speed. Its powers of acceleration from a standing start on the rising gradient may be judged from the fact that the needle of the speedometer would keep pointing to those express speeds you know the car has been officially timed as having achieved on the Alps. We could have made even faster going had we cared to push the “Eagle” to the top of its performance. Yet this is the same machine, untouched in any way, with which we had been crawling through town on top gear on little more than half the ten miles prescribed in the limit areas. Though developing such great power the engine was working as smoothly as it had been doing when just “ticking” over in traffic in top gear. Nor was the fuel consumption extravagant in face of the extraordinary powers

of performance of the machine; it worked out in the neighbourhood of 14½ miles to the gallon.

A Car that Ignores the Presence of Hills

The feeling of being thus able to treat hills as though they were not, and to ascend them by mechanical power instead of calling on a horse or other animal to toil in your service is, of course, one of the earliest delights of motoring. Hitherto, however, it has been possible to experience these things only in combination with being aware all the time of the tremendous force that is being generated on the car and passed through its mechanism to the back wheels to propel you in such speedy fashion. That is a grand enough experience itself. But far finer is this fresh revelation of Rolls-Royce genius in the ability of the machine to take you up in defiance of all gradients, at express speed, yet to conceal utterly from your senses the means by which this marvel is being accomplished. Here is no wild pounding of the motor, no scurry and spurning of the wheels, no jolt and jar of the springs. All you are aware of is that your armchair has been temporarily tilted pronouncedly backwards. That merely tells you that you are ascending a gradient which falls backwards on either side at as fast a rate as you care to let it. But as for the forces that are thus drawing you upwards, your senses are as utterly unaware of their existence as though the car were absorbing its power by wireless from some huge generating station. There is nothing to indicate to you that this tremendous force is actually being generated on the very machine on which you are travelling.

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