

A HISTORY OF COSTELLO AN

Some notes about V8 modifications

There are quite a few myths about the Costello V8's, which have given rise to some argument in the club magazine (articles and letters). Perhaps this article will dispel some of the myths and start a few more arguments.

It might be worth a look at Ken Costello himself, first of all. When I first met him in 1972 he was a short, balding chap with a slight pot belly. He ran a small garage workshop called Costello Motor Engineering Ltd., in Farnborough, Kent.

Ken is a very skilled, practical engineer, good at innovative design. He had made a name for himself in earlier years, aggressively winning lots of races with hairy Minis. When the V8 conversion idea came to him, he was of course able to drop the Buick/Oldsmobile/Rover unit into almost any car, but it was easily done to MG's and it spectacularly transformed the car.

There was no single "Costello V8", there were different versions which are more easily defined as "early" and "late" versions. The early version had the V8 unit with twin SU carburetors, a bulging (fibreglass) bonnet and a noticeably different black, aluminium grille. The late version could be fitted with the standard MG bonnet - no bulge was required since the V8 unit was fitted with a single rearward-facing Weber 40 DCOE carburettor; the standard grille could also be fitted (black, plastic "egg-box" type). The last of the late versions could either be Weber carburetted or SU carburetted engines, depending on customer preference and availability of engine units and parts.

The MG's which were converted were MGB roadsters and GT's, MGC Roadsters and GT's and even Leyland MGB GTV8's. The Costello V8's are fairly easy to distinguish in the case of the early version, with their bulging bonnet and different grille. The late version was not so easy to spot since it may or may not have had the different grille and it may or may not have had the (no longer necessary) bulging bonnet. The appearance depended very much on customer preference. Most of the Costello V8's would sport the aluminium V8 badge (off Rover) somewhere or other (usually the front) and a specially made chrome and plastic badge was often stuck on the rear end of the car - "Vee Eight Costello" I think it said.

Ken's MG customers either brought their MG's to him for conversion, or commissioned him to buy and convert new or second-hand MG's. They all wanted improved performance and they got it, whether the car was MGB, C or V8. In the case of the B's and C's, they also got a remarkable improvement in road-handling - a fact which is perhaps not appreciated as much as it could be. This improvement came from an engine which was 50 lbs. lighter than the

4 cylinder unit, and a nearly 50-50 weight distribution between front and back wheels, the V8 unit sitting further amidships than the 4 or 6 cylinder units.

At one stage (sometime in 1972, I think) Leyland (MG at Abingdon) asked to inspect one of Ken's V8's, and he obliged. During (about) 1973, Leyland sent their distributors a memo advising them not to sell the Rover 3.5 V8 assembled engine unit to Costello. When I read this memo, it seemed, to me, to be a sad move by Leyland - but it of course coincided with the planned market launch of the MGB GTV8. However the effect on Costello was interesting; unable to readily get the V8 assembly, he resorted to buying second-hand scrap/imported Buick/Oldsmobile and Rover engine blocks and rebuilding them with components bought from "tame" or friendly Leyland distributors and any other sources of the vital components. This means that some Costello V8 owners, are driving around with Buick/Oldsmobile engine blocks in their cars.



The 3.5 litre, aluminium Buick engine was produced in the US in the mid-60's and caused quite a stir amongst the racing fraternity, because of the advantageous power-to-weight ratio. Oldsmobile subsequently used the engine, changing the cylinder head and valve train to get more power. The significant differences between the two engines was just that (i.e. cylinder head and valve train), the block remaining essentially the same. The blocks were high-pressure die castings, as opposed to the UK Rover low-pressure "sand" castings. Costello's engineering knowledge told him that the US blocks were stiffer and lighter than the UK Rover blocks and were therefore a better block. The difference between the US and UK blocks can be seen and felt - the US one has a smooth finish, the UK one is rough.

And now a short diversion -

It is interesting to note here that Rover only got hold of the V8 unit by chance. A "History of Rover", read several years ago in Enfield Public Library, told that a

Rover or Leyland marketing executive stumbled across the engine as it was lying in a Mercury Marine workshop in the US; Mercury had been examining it for potential marine application, since it was such a light engine. This same engine found its way back to the UK - and went into the Rover 2000 body as a prototype. From that came the 3500 and 3500S Rover, with Rover manufacturing the engine on licence from Buick. Incidentally, Leyland Australia produced a car in 1973/74 called the P76, which uses the same basic design Rover V8 unit but with the capacity increased to 4.4 litres so that it could drag along the large-bodied P76. Disenchanted Triumph Stag owners have for years been discarding the poor Triumph V8 in favour of (usually) Ford 3 litre V6's or Rover 3.5 litre V8's; in New Zealand and Australia, they use the P76 4.4 litre V8 which gives a startling improvement.

Early Costello MG V8's used the Rover 3500S engine, which produced more power than the lower compression engine fitted to the standard Rover 3500. In order to fit the V8 engine into the engine bay, the bulkhead and other engine bay parts had to be cut into and reshaped; the consequential weakness was overcome by adding stiffening and bars at the front of the bay. In this as in everything, Costello and his company did a first-class engineering job and no corners were cut where safety was concerned.

As well as this, changes were made to the braking system - the addition of power-assist and competition disc pads if not already fitted. The exhaust manifold was made by "Mike the Pipe" and was very efficient, despite the lack of space to accommodate it. The MGB GTV8 manifold by contrast, was not so efficient, though it was used when it became available. On the input side, the SU carburetted models were basically Rover copies, then GTV8 copies. The Weber carburetted models were fitted with a stubby aluminium inlet manifold (designed by Costello), which fed into an 8-branch inlet manifold from Buick/Oldsmobile. The rearward-facing 40 DCOE had stubby outer venturi pipes fitted (good practice), enclosed by an aluminium plenum chamber (designed by Costello), drawing air down a single, large diameter, re-inforced flexible plastic pipe which connected to an aluminium casting (designed by Costello) housing a large paper-element type air filter - which was probably a Bedford van component.

The eventual freeing-up of Leyland's embargo enabled him to stop doing "special runs" and he then just threw in GTV8 engine units complete. By about 1975 Ken was probably losing interest in his V8 business as he was by then trying to get UK car manufacturers interested in a 5-speed gearbox which he had designed. He eventually joined up with a partner in Farnborough, moved his workshop a short distance and