



## **Motoring Plus: Bumbling B**

### **At last your patience rewarded - we test Costello's Rover-engined MGB.**

**Re-printed unedited from "Motor". This article originally appeared in their issue for the week ending June 2, 1973.**

Regular Brands Hatch spectators will certainly remember Ken Costello as a Mini driver of no small repute; now he is better known as the man who puts Rover 3500 engines into MG Bs. He got a lot of publicity for this interesting conversion by letting the motoring correspondents from the national Sundays have a gentle 10-mile jaunt in one of his cars, whereupon they all published suitably ecstatic road test reports. Somehow he felt shy of the specialist press, it seems, for he gave us a 10-mile ride too, but would not let us borrow the car to take to MIRA for performance testing. So we fell out. For our part, we could only conclude that he was not confident that his car would be able to withstand our normal test procedures.

Next thing we knew a full test on a Costello V8 was staring at us from the pages of a deadly rival, so we rang Ken and, apart from the swearing, said very little. He replied that he had lent the car for photography only and claimed that he had had to rebuild the engine completely because it had not even been run in. Yes, he had meant to give us the first test car.

We offer all this by way of an explanation to the large number of readers who kept ringing and writing to our offices to ask us when we would be testing a Costello MG. Eventually it was a reader who offered us his own car, the results of which are published here. We rang Ken again to get the technical details, and now he tells us that he has yet to lend us a car as he's been saving up his latest machine specially for Motor; development is almost finished on a V8 MG B with Ken's own five-speed gearbox. Should be interesting, if we can have it, Ken! Rumour has it that Ken C. won't be the only man in the MG B conversion [business] for much longer, so there may be an interesting comparison for us to report on soon.

The car we tested is already a little out of date. Ken began by fitting a completely standard Rover V8 engine to the MG B, complete with SU carbs that called for a power bulge in the bonnet. Current cars have a Weber carb which permits the use of the standard bonnet. Other mods were a higher back axle ratio of 3.07:1 instead of the standard 3.91:1, a C-type propshaft, and a modified steering column with two Hooke joints instead of one which made it possible to fit some kind of a special exhaust manifold to the offside cylinder bank without fouling the steering.



**Costello MGB V8 from BMH 512H engine bay (Photo by Lawrence Wood)**

This exhaust manifolding certainly looks somewhat stangulatory (have I invented that word?) and may well have an adverse effect on power output. The standard engine as fitted to the Rover 3500 turns out 144 bhp (DIN) at 5000 rpm and 197 lb ft (DIN) at 2700 rpm: simply because the manual gearbox in the 3500S leaves room for better exhaust manifolding, the S engine offers 150 bhp (DIN) at 5000 rpm and 204 ft lb (DIN) at 2700 rpm.

Ken claims 175bhp (gross) for the standard engine; this may well be true but gross figures are misleading because they don't take the all-important ancillaries - including exhaust manifolds - into account. The old MG C straight six produced 145 bhp (net) at 5250 rpm and 170 ft lb (net) at 3500 rpm but that car was killed stone dead at birth by the Press, as is well known.

Looking back at our Road Test we were not guilty of irresponsible criticism, but we did point out that even then, back in 1967, the MG B/C's controls and finish were somewhat dated. Despite its nose heaviness and poor low-speed torque we still rate the MG C as a very good second-hand buy for today's two-seater customer. We tested a very pleasant example a few months back for which £600 was being asked, and felt that it measured up very well against similarly priced worn-out Elans and slightly newer MG Bs. One trouble with the B is

that it only produced 95 bhp (net) at 5400 rpm and 110 lb ft at 3000 rpm, which is why you see irresponsible middle-aged men in Mazda RX3s tearing away from them in the current adverts.

The other problem with the B is that it is really rather long in the tooth now, in all respects, offering inferior road holding, handling, and steering when compared with many modern saloons. The ride is nothing special and even the GT suffers badly from wind noise, which was quite appalling in the test car we have just been driving. So while we're not sure whether we would want any kind of MG B these days, if we had to have one we would certainly want it to go better than the standard one.

Costello's machine certainly does this, making the ordinary B look very silly and even making mincemeat of the poor old C as well. Trouble was that we didn't want to break anything on our friendly reader's car and the completely standard transmission (apart from rear axle ratio, of course) was showing signs of complaint on the standing start runs. Letting in the clutch hard at 3000 rpm was obviously ideal for quick times but we soon settled for feeding it in a little more gently because of the nasty banging noises inside the transmission tunnel.

For the same reason we did not rush the gearchanges too much either, but even so we still noticed a degree of rear wheel steer in the form of a wiggle (so to speak) on changing up under hard acceleration, so obviously the back axle was getting rather wound up. Despite these tactics we still managed 0-60 mph in 8.0s and 0-100 mph in 23.9s and you can see from the figures that the standard B is hardly worth comparing with this kind of performance. The MG C reached the same speeds in 10.0s and 30.1s, by the way.

Top speed is over 120 mph for the V8. With a touch of adrenalin and an extra tug on the seat belt, I went round the banking at MIRA and through the timing lights at 124.1 mph, and it gained about 150 rpm before the next banking when tyre scrub slowed it down a little. We estimate that the mean top speed would come out at about 125 mph.

We would not like to drive the Costello machine hard all the time as, subjectively, it feels cruel to the standard transmission and suspension. Ken has had to blank off overdrive on third gear on the current cars since a couple of converted machines were brought back under warranty with broken third gears after the customers had repeatedly changed down from overdrive under full throttle in third gear. Clearly the ordinary B box is operating near its limit.

This is one reason why Ken has invested in a completely new box, the other reason being that the standard B ratios are not very good because of the large gap between second and third, a fault that was accentuated on the C by its poor low-speed torque, but which is to a large extent masked by the excellent low-speed torque of the Rover mill. We were able to take it below tickover speeds in direct top gear by holding it against the brakes momentarily: it is then possible to push the accelerator pedal to the floor and pull away without hesitation or jerking. As you can see we took a 10-30 mph figure in top and all the low-speed top gear acceleration figures are very impressive indeed.

Fuel consumption came out overall at a very acceptable 22.6 mpg giving a range of just over 270

miles from the 12 gallon tank. A bigger tank wouldn't be a bad idea, Ken, as it would make the car into an excellent reasonably priced high performance touring car. With handling that is only marginally better than that of a standard B, however, it is not really a car that can begin to compete with the best modern sports cars like the Lotus Elan Esprint and Europa for sheer driving pleasure. It's more of a competitor with say the Datsun 240Z, and well worth considering as an alternative to that car.

Although Costello's car has a slight rearward weight bias (whereas the standard B GT is just heavier on the front wheels) we were surprised to find that the V8 was very slightly heavier overall than the standard car. The Rover engine is meant to be lighter than that of the B, so perhaps the car itself has put on a bit of weight since then. The steering feels slightly lighter than standard, but that's not saying much as the B needs tough, muscular armwork anyway. Ken's extra Hooke joint in the column seems to have no adverse effect, though British Leyland criticised it on safety grounds when a Costello V8 was submitted to Abingdon for assessment. They did not like the welded steering joint, apparently, but Ken claims that his steering mod is carried out by the same firm that supplies similar steering gear for Triumph cars. "It it's all right for Triumphs, it's all right for my B," he says. We could get no further comment from BL on the subject, though they did say they have no ill-feeling towards the enterprising Mr. Costello: on the contrary, they admire his initiative.

One point that should be cleared up here is that BL did not cut off Ken's supply of engines out of spite. They are short of them for Rovers and Range Rovers anyway. They have a longstanding arrangement with Morgan over the Plus 8, but it seems that Ken's production of MG B V8s is so small that BL would be making a loss if they supplied him anyway. So he found a source of blocks which he builds into complete engines on his own premises. The only other difference between our test car and current cars is that the latter have a thermostatically controlled electric

cooling fan. When the five-speed box, the gears for which are being made by Hewland, no less, comes on to the market it will cost well over £200, though customers will save a little as the standard axle ratio can be retained.

There you are, faithful readers. I hope it was worth waiting about 18 months for this test. Now, how about that five-speeder, Ken?

- Tony Dron

Car: **MG B GT**

Conversion by: **Costello Motor Engineering Ltd.**  
**Farnborough Way, Farnborough, Kent.**

Conversion: **Installation of a Rover 3500 engine, high rear axle ratio, heavy duty prop shaft.**

Price (correct in 1972): **List plus £975 making car as tested £2522 less extras.**

	<b>MG B GT</b>		<b>V8 MG B GT</b>	
<b>MAXIMUM SPEED</b>				
	mph		mph	
Lap	107.6		see text	
Best 1/4 mile	-		124.1 mph	
<b>ACCELERATION</b>				
	mph	sec	sec	
0-30		3.6	2.7	
0-40		5.6	4.1	
0-50		8.2	5.9	
0-60		11.6	8.0	
0-70		15.9	10.6	
0-80		21.4	13.3	
0-90		30.2	18.1	
0-100		46.3	23.9	
standing 1/2mi		18.2	15.9	
standing km		33.9	29.3	
<b>IN TOP (direct)</b>				
	mph	sec	sec	
10-30		-	6.6	
20-40		9.2	6.0	
30-50		8.8	5.6	
40-60		8.9	5.2	
50-70		10.5	5.4	
60-80		12.7	6.4	
70-90		16.1	7.4	
90-100		-	10.0	
<b>IN THIRD (direct)</b>				
	mph	sec	sec	
10-30		6.7	4.4	
20-40		6.2	3.9	
30-50		6.1	3.8	
40-60		6.7	3.9	
50-70		7.9	4.2	
60-80		-	5.4	
<b>FUEL CONSUMPTION</b>				
Steady mph	top mpg	o/d top mph	top mpg	o/d top mpg
30 mph	42.1	47.4	30.3	34.4
40 mph	40.2	44.0	30.4	33.8
50 mph	36.1	40.9	29.7	32.0
60 mph	32.9	37.8	28.3	30.0
70 mph	29.5	33.8	26.4	28.3
80 mph	24.8	28.9	24.5	26.5
90 mph	20.5	24.4	22.2	23.5
100 mph	16.6	19.5	-	-
	mpg		mpg	
Overall	27.4		22.6	
Touring	33.0		25.6	