

THE MGC GTS LIGHTWEIGHTS

Yet there was no mention of MBL ever having such an engine, and he suggested that all of the spare cylinder blocks were porous and subsequently scrapped!

Unfortunately, the passage of time can play tricks on the mind, but two spare cylinder heads and two spare cylinder blocks were put into stores and subsequently found a home with John Chatham after the factory closure. We know that John Chatham purchased all the remaining MGC GTS stock when the Comps Department closed in 1970. He built a racing engine

from these components and installed it in his successful MGC modified sports racing car.

Unfortunately the true potential of the prototype alloy engine was never realised: the top brass at BMC pulled the plug and the Comps Department died a premature death, along with the promising MGC lightweight racing cars.

One final note: I haven't come across anybody who suggested that three complete engines weren't built!

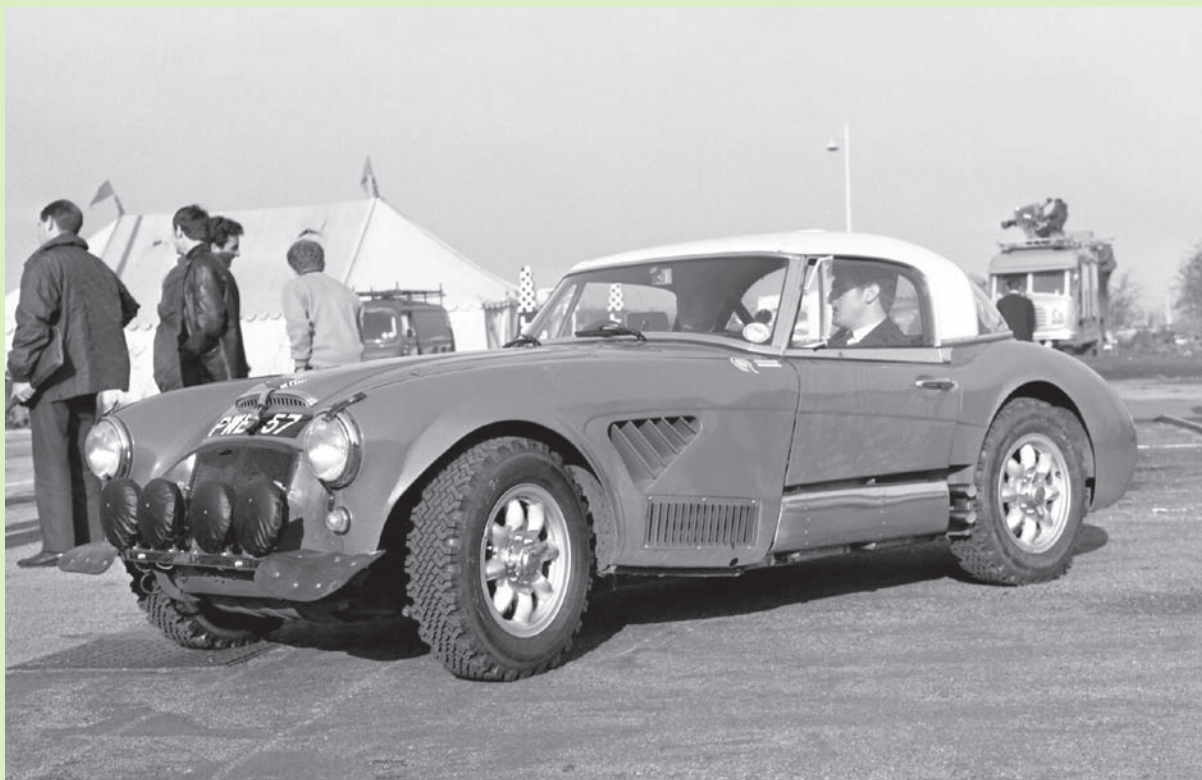
ALL DRESSED UP AND NOWHERE TO GO: THE ABORTED RAC RALLY HEALEY

The Austin-Healey 3000 – the stalwart of BMC competitions efforts in international rallying before the arrival of the world beating Mini Cooper – had never won the RAC Rally. It had come very close in 1965, when one of the two works-entered Healeys finished in second place, just behind one of the works Mini Coopers.

Timo Makinen and Paul Easter were most unfortunate in that the exceptional snowy conditions

hampered the traction of the powerful rear-wheel drive car rather more than their competitors. The nimble front-wheel drive Mini Cooper was ideally suited to the conditions, and their teammates, Rauno Aaltonen and Tony Ambrose, stole the victory on the last day of the event.

No works Healeys were entered for the 1966 RAC event but 1967 saw the Competitions Department preparing a 3000 for the last time. The influence of Timo Makinen and the resourcefulness of Abingdon Competition Manager Peter Browning, saw his personal



This last Austin-Healey 3000 was a brutal beast of a car, and whilst it's appearance was more akin to a backyard special it gave life to the fastidious preparation afforded it by the Competition mechanics. Sadly it was never to appear in anger after the cancellation of the 1965 RAC Rally of Great Britain. (© British Motor Industry Heritage Trust)

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MGC TECHNICALITIES

THE TRANSMISSION

A new four-speed all-synchromesh gearbox with an integral bell housing and remote control gearlever was standard. An optional Laycock LH type overdrive was offered, which provided an overdrive ratio of 0.82:1, and could be engaged on third and fourth gears only. This

was a conventional arrangement. Access to the inside of the gearbox, viewed from the front, was gained by removing an alloy cover on the right-hand side of the casing, behind which the gear selectors resided.

Gear ratios were as follows:

	Gearbox ratios		Overall ratios			
	Early cars without overdrive	Early cars with overdrive, plus all later cars	Early cars		Later cars	
			Without overdrive	With overdrive	Without overdrive	With overdrive
First	3.440:1	2.98:1	10.56:1	9.85:1	9.85:1	11.03:1
Second	2.167:1	2.058:1	6.65:1	6.81:1	6.80:1	7.61:1
Third	1.382:1	1.307:1	4.24:1	4.32:1	4.32:1	4.84:1
Third o/d		1.0717:1		3.544:1		3.97:1
Fourth	1.00:1	1.00:1	3.07:1	3.307:1	3.307:1	3.7:1
Fourth o/d		0.82:1		2.71:1		3.034:1
Reverse	3.095:1	2.679:1	9.5:1	8.86:1	8.86:1	9.91:1

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Following the problems encountered in Sicily, modifications were swiftly implemented by the works in preparation for the Sebring 12-hour endurance race, when the car would assume its correct identity with the MGC engine. The testing of these changes was both rigorous and thorough, and where necessary more improvements were made to make the car more competitive. (Courtesy Bill Price)

The 12 hr. export drive

**Category and Class wins
for BMC at Sebring**

Sebring, Florida, USA. Hot, flat and windy. Speed country. Scene of one of the world's fastest 12 hour track races. Where 102 mph. is a mere average. Where cars come so big, they don't even notice BMC overtaking them. Until it's too late.



BMC Scoreboard: 12 hr. Sebring

MGC TENTH OVERALL
Paddy Hopkirk/Andrew Hedges
FIRST IN 2500-3000cc PROTOTYPE CLASS
THIRD OVERALL IN PROTOTYPE CATEGORY

MG MIDGET FIFTEENTH OVERALL
Jensold/Trevis/Randall/Candfield
FIRST OVERALL IN SPORTS CAR CATEGORY
FIRST OVERALL 1150-1300cc SPORTS CAR CLASS

AUSTIN HEALEY SPRITE 34th OVERALL
Clive Baker/Mike Garon
FIRST IN 1150-1300cc PROTOTYPE CLASS

MGB EIGHTEENTH OVERALL
Garry Rodrigues/Richard McDermott/Bill Brack
FIFTH IN 1600-2000cc CLASS

68 starters 35 Finishers **ALL BMC ENTRIES FINISHED**
Subject to official confirmation.



**When BMC go on an Export Drive
-the competition knows it!**

the MGC GTS programme finally got under way, with the appearance of MBL as a fully fledged MGC. Under the bonnet, the MGB engine had long gone, and the new 202bhp straight-six was in its rightful place, as intended. North America and Canada were vital export markets for BMC, MG in particular, and with the help of the local dealers it was always hoped that the cars would perform well. Peter Browning had replaced Stuart Turner as Competition Manager, an extremely hard act to follow, and the driver line-up for the Sebring 12-hour race was Paddy Hopkirk sharing with Andrew Hedges. Andrew was having his first competitive outing in the car, after being deprived of his chance the previous year in Sicily.

The weather conditions for the race were cool and sunny, the final result a dream come true, fully justifying the MG management's commitment, and the outstanding preparation and teamwork. Despite the car carrying the same number (44) and crew as the ill-fated MGB Roadster, 8 DBL – which had thrown a connecting rod with only an 1½ hours to go when running first in the prototype class in the 1966 race – the team were rewarded with the best-ever MG placing tenth overall at the Florida race track, as well as being the highest placed British car to finish the race. The team won the three-litre class, and was placed third in the prototype

Canadian Bill Brack had shared the MGB GT LBL 591E the previous year and driven for the Lotus Formula 1 Team at his home Grand Prix. He would race for the BRM F1 Team later in the year and again in 1970. He acquitted himself well in practice on the 8.369km track, qualifying his MGC GTS MBL 546E in 42nd position with a time of 3 minutes 26.740 seconds. The other car qualified 49th in 3 minutes 30.310 seconds.
(Courtesy Henry Camisasca/ John W Thornley)



After the problems at the Nürburgring, traditional wire wheels became standard fitment. Here we see Paddy as he hurls RMO 699F through another of the flat curves of the airfield track synonymous with Sebring. This was the last outing for the car. (Courtesy The Revs Institute, Duke Q Manor Photograph Collection)

Role reversal: after a promising qualifying session when the older car out performed it's newer sister car, the Canadian crew of Bill Brack and Craig Hill (seen here at the wheel) brought the car home safely, but 19 places further down the field.
(Courtesy The Revs Institute, Duke Q Manor Photograph Collection)



APPENDIX 1

MGC GTS MBL BUILD SHEET

15/5/68
Date: 22-23 MAY 1968 Event: MARATHON Cat. & Group: PROT
Car Type: MGC GTS Engine No.: Chassis No.: ADG 52/1060 Comp. No.: Mechanic: EVANS, J.

This is orig. car. MSh. 546 E. built 1967 for Tony

Cylinder Block

✓ Bore size 4.040" 2968 CC
 ✓ Modified YES
 ✓ Pume pipes 4 INTO TWO LITRE SPILL TANK
 ✓ Crankshaft 704/236 LATEST TYPE WITH SMALL DIS DRIVE GEAR
 ✓ Crankshaft NITRIDED WITH BALANCED CLUTCH UNIT
 ✓ Flywheel STEEL LIGHTENED
 ✓ Clutch SPL COMPETITION SPEC FROM LOCKHEED
 ✓ Release bearing SPL COMPETITION " " "
 ✓ Bearings cam STD
 ✓ Bearings crank VP 19D 9675
 ✓ Con rods STD BALANCED
 ✓ Pistons Y ALLOY 4.040
 ✓ Oil pump STD CHECKED
 ✓ Oil pump drive STD MECH
 ✓ Camshaft gear STEEL SPL
 ✓ Crankshaft gear STEEL SPL
 ✓ Timing chain STD
 ✓ Core plugs STD PEEN ROUND EDGES
 ✓ Dip stick & washer BLUE
 ✓ Oil filter element RE NEW
 ✓ Distributor RT 22714
 ✓ Ignition setting SET ON BEST BED OR ROLLING ROAD
 ✓ Engine rubbers STD
 ✓ Check Engine No. Plate YES
 ✓ Filter gear NIL
 ✓ Primary gear NIL
 ✓ Oil pressure CHECK & REPORT -
 ✓ Sump & protection NIL
 ✓ Sump plug WIRE LOCK
 ✓ Oil cooler FIT TWO C-ARO 9809
 ✓ CON ROD BEARINGS VP L8297/1 SPL

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Cylinder Head

✓ Type ALLOY SPL
 ✓ Modified GAS FLOWED & POLISHED) CHECK FOR COMPRESSION RATIO
 ✓ Compression ratio 10.25-1
 ✓ Amount removed REPORT -
 ✓ Combustion space REPORT -
 ✓ Exhaust valves NIMONIC 80
 ✓ Inlet valves NIMONIC 80
 ✓ Top caps
 ✓ Bottom caps
 ✓ Valve spring inner
 ✓ Valve spring outer
 ✓ Thermostat FIT BLANKING INSERT
 ✓ Sealing points NIL
 ✓ Exhaust manifold DOWNWARD SPL
 ✓ Inlet manifold SPL TO FIT WEBER CARBS) POLISH & LINE UP
 ✓ Lugs NYR RUNNING IN, NYR
 ✓ Rocker assembly CRACK TESTED AND MODIFIED
 ✓ VALVE GUIDES BRONZE SPL
 ✓ CYLINDER HEAD WASHERS FLAT WASHERS CASE HARDENED
 ✓ SPL CYLINDER HEAD NUTS FIT THREE PEDASTAL NUTS