

Period Power

You don't have to go for drastic engine swaps to drag the MGB into the 21st century as Greg Whitaker finds out.

It's a well-known fact that when the first many-legged and whiskery creature emerged at the dawn of time, BMC had already been making the MGB for years, and were busy bickering about ill-conceived replacements. Alright, perhaps that is a little harsh, but there can be no denying the most famous car to carry the MG brand soldiered on with minor, and not so minor, adjustments to make it fit around various legislation long after it was due to be replaced.

Perhaps the secrets of its long-lived appeal lie in the design. Not only was it easy to produce, but it is easy to maintain as well. It isn't just its rugged simplicity that has endeared it to generations of motorists,


though. Even in its final high ride height rubber bumpered form it's still a rewarding and fun motor to spank around in.

David Evan's MGB roadster is no ordinary 'B'. Not only is it a repatriated American car, restored back to UK spec, but also beneath the standard British racing green bodywork lies a B-series engine with a big fat supercharger. Supercharging has been a way of squeezing a bit more power out of petrol engines practically since the dawn of motoring, and this blower from parts giants Moss certainly looks the part. With its elegant casting featuring the MG motif, the supercharger could have been fitted on the Abingdon production line thirty-five years ago, were it



Photography by Matt Richardson



SPECIFICATIONS

1967 Supercharged MGB roadster

Engine	1800cc, OHV, Piper 255 cc, Moss supercharger
Power	Never tested on
Torque	rolling road.
Transmission	Four speed OD. RWD
Brakes	Disc/drum
Suspension	Lever arms Rear: Parabolic springs, telescopic struts.
Wheels	14in steel
Tyres	5x14in cross-ply
Top Speed	75mph
0-50mph	18.5sec

not for the stick-on barcode on the top.

The 'charger uses the Eaton positive displacement system. In layman's terms, Moss engineered an intake manifold that provides equal airflow, pressure and fuel mixture to each cylinder. By optimising the mix in the manifold, the boost pressure of the blower can be raised without either wasting fuel or damaging the car's engine.

Fitting the unit was simple enough. However, getting the timing right proved to be a bit more of a problem. Because of the varying pressure in the inlet manifold, the distributor needed to advance and retard a at

faster rate than the distributor was able to do. As a result, David decided to experiment with Lumenition electronic ignition, and a distributor with heavier bobweights and tighter springs. This ended up needing more fiddling with than David or MG specialists LMG at first realised, and several test drives were needed to get the settings right.

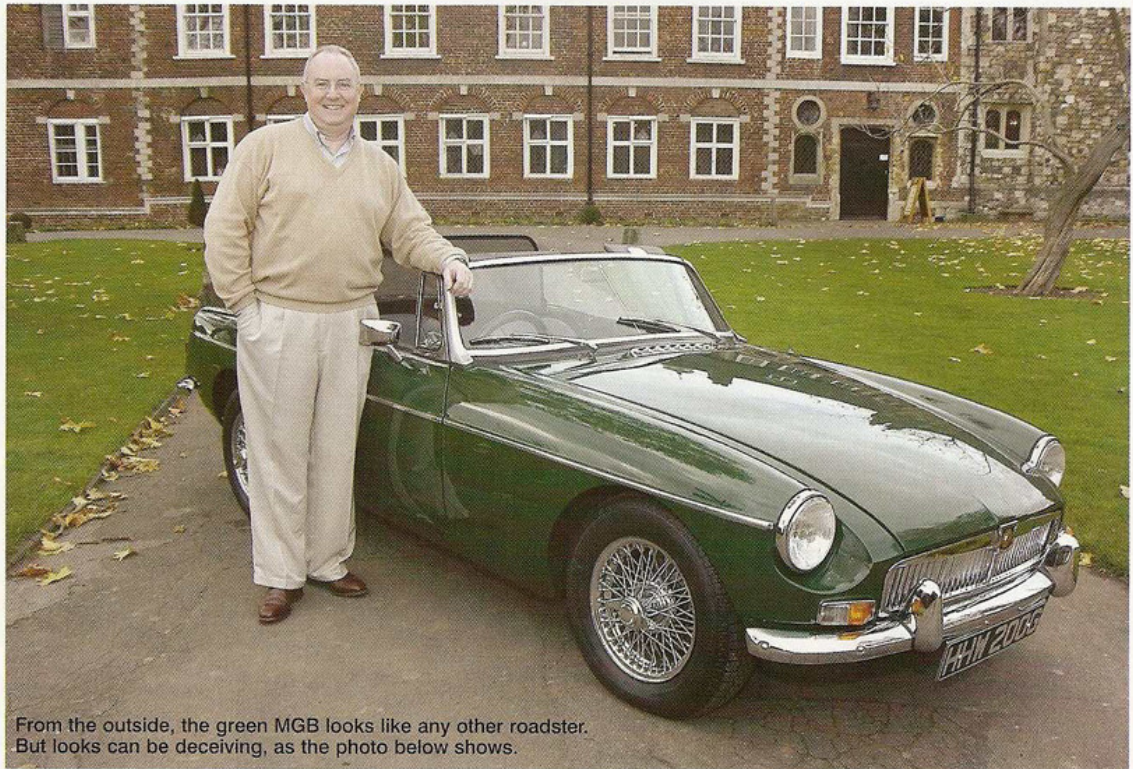
The brakes were upgraded as well. The MGB now stops with Mintex V8 pads on refurbished callipers, while more pedal control is provided by a servo unit, which would have been optional when the cars were new. The upgrades didn't stop there either, as the car has parabolic springs fitted to the back end.

"I fitted the improved rear suspension so my wife might travel in the car"

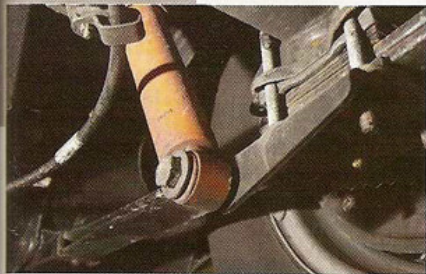
Put simply, parabolics are a replacement for the original leaf springs. The problem with leaves is that the force required to flex the leaves is high, so it remains rigid and the bump shock is transmitted through the car, jarring the occupants. The parabolic spring, however, has a taper rolled into it, thickest in the centre and tapering evenly to the thinnest part at each end. The degree of tapering is calculated proportionately to its length and load requirement. With precise stress distribution throughout its length, the spring flexes, absorbing lesser impacts whilst retaining its load bearing capability. Hence the

Blown MG gets buffeted by the autumn winds. Plate on the silver car makes people look twice.





From the outside, the green MGB looks like any other roadster. But looks can be deceiving, as the photo below shows.



Telescopics and parabolic springs are a good way of assisting rear suspension.

ride comfort is greatly improved, and handling is enhanced with greater tyre to road contact.

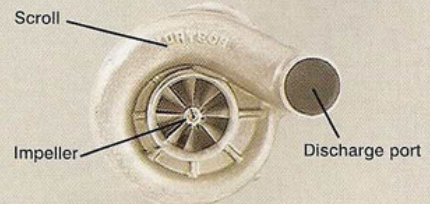
"I fitted them so that my wife might travel in the car," grinned David. "But the handling is much better now."

On the road, it's amazing how docile this car is at traffic speeds. Despite the engine having been rebuilt with a slightly lumpier cam and all the other tweaks, the electronic brains make the car much easier to drive in traffic. Sliding through some slow-moving traffic, the engine speed adjusts automatically to suit – so no fuel-spitting carbs here. The chubby little steering wheel makes the steering feel slightly heavy, but it gives a good feel of the road. The rest of the car is characteristically 'B', with its stubby shift and roller-smooth lever front dampers, and the machine takes on a different persona entirely when on the open road. The reward for dropping the car into third and opening the throttle is a fantastic whine from the supercharger and plenty of easy power. Unlike a turbo, the power doesn't lag and come in with a jolt, instead it breathes in gradually as if it were a larger engined but normally aspirated car. The parabolic springs at the back really do iron out the bounce, and ▶



Supercharger

Originally dreamed up in the early days of motoring, a supercharger is what is known as a positive displacement pump. Its purpose is to increase air pressure and density in the intake manifold. It does this by pumping more air than the engine would use without a supercharger. The supercharger is matched to the engine by its displacement and belt ratio, and can provide excess airflow at any engine speed. This concentrated charge of air provided by the supercharger results in a more powerful combustion stroke in the engine's cylinders, resulting in improved performance over non-



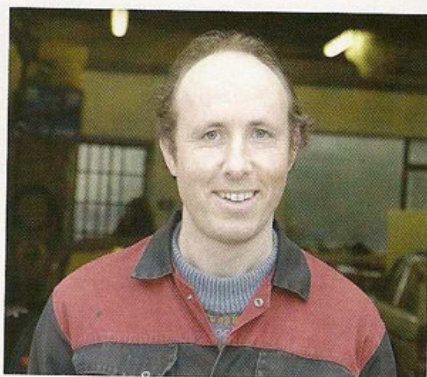
supercharged vehicles. Proving that sometimes you really can have your cake and eat it, an Eaton-type supercharger doesn't use much more than a sip of extra fuel for around town driving, and is just as economical on the motorway.



SPECIFICATIONS

1981 MGB GT LE

Engine	1924cc OHV Piper 285 cam Superchips management
Power	130bhp @ 4500rpm (est)
Torque	160lb ft @ 2000rpm (est)
Transmission	Four speed with OD. RWD
Brakes	Disc/Drum
Suspension	Front: Torsion bar, lever arm Rear: Leaf spring, live axle
Wheels	14in LE-type
Tyres	14in x 175
Top Speed	120mph (est)
0-50mph	8 sec (est)



Stuart Payne from specialist workshop LMG has been building MGBs since 1988.

the back of the car holds its path as if it were strapped to the white line.

Cornering is good as well, with the wide 175 section tyres on the wire rims gripping the tarmac and, while the body rolls on this MG a bit, the back end keeps in line and will only step out if seriously provoked.

All in all, this car feels like super-concentrated MGB puree. All the handling and driving characteristics of a 'B' are there, only intensified. In a way, this car represents the best reasons for modifying a classic, as the way that the car moves is vastly improved, but without compromising any of the reasons why the owner chose an MGB in the first place.

Also not compromised is Mr. Pope's silver MGB LE. Mr. Pope bought it as a near-immaculate example a few years ago, and used heavily for a while until some accident damage down one side prompted some repairs. As one front wing and the back panel were going to need straightening anyway, the owner took the decision to retro fit the car with chrome bumpers. Anybody who has ever taken apart 1970s MGB or Midget will tell you that it isn't a simple matter of heaving off the black bumpers and bolting on chrome ones. The wings need to be welded, the chassis legs need shortening, and the mounting parts of the grille have to be recessed – and that's just the front. Stuart Payne at LMG explained that the rubber bumpers that came off the car weren't exactly lightweight either.

"The problem is that the bumpers aren't just made of rubber." He said. "They also contain a great big bit of metal, like a girder which really weighs them down. When the front one comes off, you can actually see the car rise up at the front, so lowering the suspension on any converted car is essential."

Before the car had the new bumpers fitted, it was resprayed back in the original LE silver, courtesy of the insurance company. Rather than spray it in the original single-pack paint, which was hard to come by and match, LMG used modern two-pack, which is much more





durable and has better scratch resistance.

To look at, the car is a mix of old not so old. The silver paintwork suits the Pinninfarina shape of the GT and makes the car look younger than it is. The chrome bumpers, of course, date the car a little beyond its years, and you have to look twice at the number plate to work out what has happened.

While the car was off the road, it seemed the ideal time to upgrade the running gear. The engine was removed and stripped down, bored out to 1924cc, given a lumpier Piper 285 cam, lightened flywheel, toughened crank and oil cooler. Like the other car, the owner of this LE has gone down the path of digital engine management. It has certainly paid off, and even with the cam and the compression ratio, the car can sit at idle, growing through its big bore stainless steel exhaust.

The suspension has enjoyed some upgrades as well, with a telescopic conversion kit at the front, which bolts diagonally across from the lever arm, taking the strain away from the lever. The back end has similarly benefited from telescopic dampers and lowering blocks.

To drive, the LE is a little more raucous than the roadster. With induction roar as well as a throaty burble from the exhaust. The handling is as precise as you'd expect from an updated car and there is a pleasant breeze coming in from the full-length sunroof. One aspect of the car that hasn't been changed is the interior trim, which is covered in a kind of striking, seventies-tastic deckchair stripe.

If the prehistoric whisky thing from the deep got it's tentacles behind the wheel of either of these cars, it would no doubt feel comfortable with the way these MGBs still look like the cars he remembers from his youth. However, should his proboscis put the car in gear, he would probably be surprised the way that the cars have turned out. ♦

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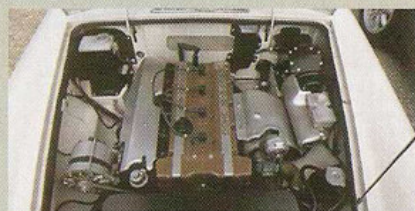
LMG Kent, 0208 3054811 www.mgcars.org.uk/lmg
Jacobean Barn in Bexleyheath for the location.

HAL PLACE

So many more mods available

There is such a plethora of modifications available for the 'B', it is amazing that any two are the same. Most of them won't increase the cars value but, unlike many classics, won't decrease it either. Popular at the moment is the chrome bumper conversion, but this is far more involved than you would imagine, and it's really only viable for cars that are already undergoing restoration, or are having repairs done, as there is a fair bit of grinding, welding and respraying required. Should you wish to go down this route, it's worth noting that original chrome bumpers are of a better quality than reproduced items, so many people get old ones rechromed. Other modifications include having the engine rebuilt with a higher profile cam. The choice on these is varied and depends on how hard the

car is going to get used. Also widely available is a choice of cylinder head modifications. Unless the car is going to get extreme use, it isn't worth doing much to the front suspension. The back end though, sits on the ground much better and has less 'bounce' if upgraded to parabolic springs and telescopic dampers.



Swaps aren't needed to get more from the 'B'

