

June 1988 £3.45

# Kit car



**CALEDONIAN CLASSIC**  
**The Haldane 100**



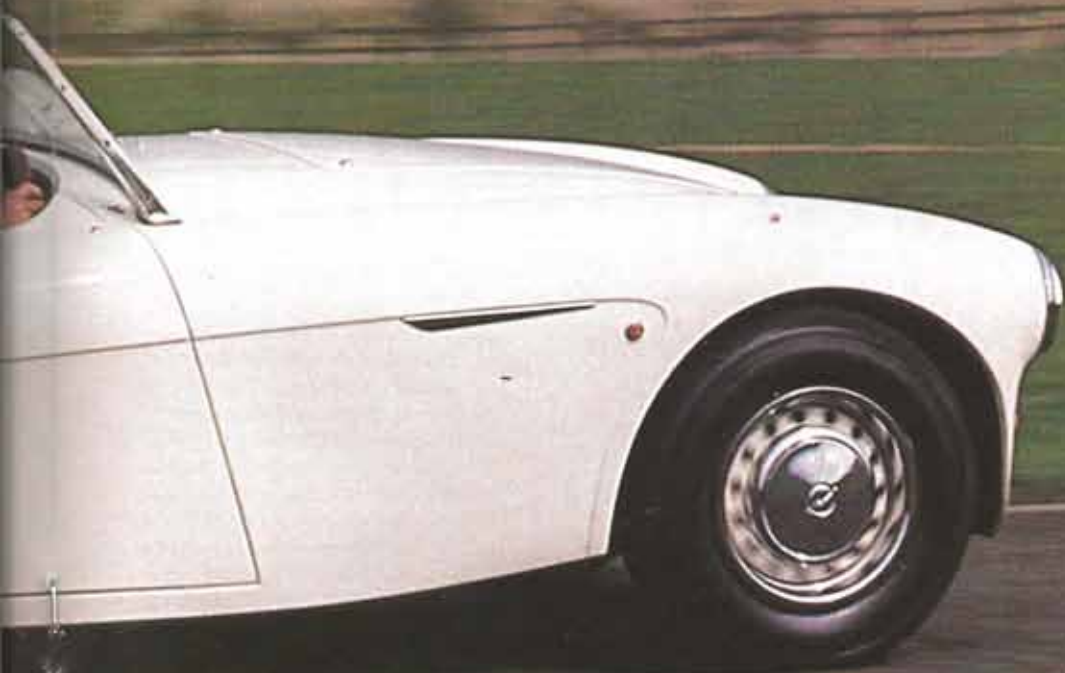
**DUPLICATE DINO**  
**The DGT**



# HEY HEALING



# G PROCESS







# HEALING PROCESS

**W**hen a microlite aircraft builder and a wind turbine

engineer combine to set about building a car, you would naturally expect the results to be quite impressive. Brian Harrison and Alisdair McLean Scott are the two gentlemen in question and, with financial backing from John Haldane, formed Haldane Developments. And so, aided by the superb, hi tech and top secret string computer, our intrepid engineers commenced designing and building the HD 100, a replica of one of the mid 50s and early 60s classics, the Austin Healey 100/M.

The Healey was one of those cars that was always at the forefront of sports car racing during the period, (do you remember classic TV film from races of the time, Monte Carlo and the like? Yes, THAT car!) It was admitted for many reasons. Its visual impact, strength

*An early morning drive to Scotland is a pleasureable experience at the best of times and, when a chance to drive an all time classic replica is added, it becomes a memorable one as Kevin McGoverin reports on his Healey highland fling.*

and smooth acceleration combined with reliability made it a much in demand model. To be fair, it did have its drawbacks. It suffered occasionally from a lack of ground clearance, the heat in the cockpit at times made it feel as if the incumbent of the said area had been placed in the hottest part of the oven, and last, but by no means least, the terror of all steel bodywork, rust.

So, armed with this information, our Scots wizards set

about producing the HD 100 with a determination to provide real motoring enthusiasts with a vehicle of high quality which would reflect the plus points of the original at the same time, working to eradicate those areas which scored minus marks.

The steel chassis, jig assembled to ensure uniformity of production, is a basic four rail ladder frame using 80 x 40 x 3.2 mm main rails and 40 x 40 outriggers while the whole thing is

fully drilled and bracketed to accept the donor mechanics which, in this case are Vauxhall Chevette. These comprise the complete front crossmember which currently attaches to the chassis via the standard rubber bushes although a conversion to solid ones will be tried as an experiment. At the back several modifications have taken place. The standard torque tube is dispensed with and the axle is located by a classic five link fixing. This features special bracketry welded to the axle which accepts the shortened standard trailing arms, two additional arms and the shortened panhard rod. In addition, the Chevette coil springs are dropped in favour of two Spax coilover units and a new propshaft completes the installation.

As far as engines go, builders of the HD 100 have a wide choice. The demonstrator is fitted with a 2 litre Cortina OHC unit which gives a decent blend of power and economy as well as serving as a popular development engine. It is





*It looks a little bare but original bumpers, as well as all brightwork, is still available. The grille has been specially made.*

a standard unit but, due to Brian's extensive racing experience with his own cars as well as preparation of an Ensign driven by Mo Nunn, no less, he is a fan of Fish carburetors and this engine uses a 1 1/4 unit which only boosts power by about 5 bhp but gives a significant increase in bottom and mid range torque.

As I say, it will be a popular engine but, for those who require more power, once the handling niggles are overcome, the small twin cams from Fiat, Alfa or Toyota will fit the bill very well indeed.

The body design, in the main, remains true to the original Healey 100/M, although some lines at the rear have been taken from the later 100/S and 3000 models. The bodyshell comprises a standard 6 and 8 oz lay up of CSM reinforced with woven cloth and coremat where necessary. Indeed, strength has been of paramount importance in making the body which, when completed will be a virtual monocoque on its own and will add rigidity to the flat chassis. All the internal panels including the floorpan, are bonded to the main body while still in the mould to achieve a totally sealed unit. The strength of the body gives excellent impact resistance, especially in the door areas which are double skinned with woven roving and coremat reinforcement. The door pillars on the body are of GRP box section design using steel backplates for the hinge location. The bonnet and boot panels are similarly reinforced and, together with the steel chassis, create a safe interior for the passengers. The only item currently missing is a roll over bar which, while many may regard as detracting from the classic lines of the car, will enhance safety in the event of a collision and this is offered as an option.

Opening the bonnet reveals the Cortina engine with bags of room for the alternatives mentioned while.....

'You could also put a Rover V8 in there', said Brian in his Scottish brogue.

'Wow, really?' said I with, I'm afraid, rather obvious excitement in my voice and face.

'Certainly', he replied, 'but don't ever ask me to help you get it out again!'

'Thanks a lot'.

Looking past the engine also revealed the hastily added inner wheelarches which have been considerably beefed up and extended on the production bodies to render the front end rigid as well as to keep the engine bay clean.

**'swung the impressively large bonnet from lock to lock through the S bends.'**

Moving back to the cockpit, you see a very inviting driver's seat faced by a flat, full width dashboard housing Triumph gauges. However, photographs of original cars will reveal the rather unique arrangement these cars employed and which would not be hard to duplicate. The edge of the cockpit is currently finished in a bare GRP border but again, said photographs will reveal the polished aluminium strip that neatly finished the job.

The screen on original cars was also unique in that it slid down, bottom edge forwards, in order for the driver to experience the wind in his hair and, while the Haldane screen uses cast uprights which means it will not fold down, you can still get all the original hardware either specially from Haldane or from SC Austin Healey, tel 0293 547841.

Opening the boot reveals the special, 7 gallon fuel tank which sits above the rear axle with space for the spare wheel on top. Even with the spare and the boot



*Rear lights are a bit of a compromise but, if you want the right hardware, it is available.*

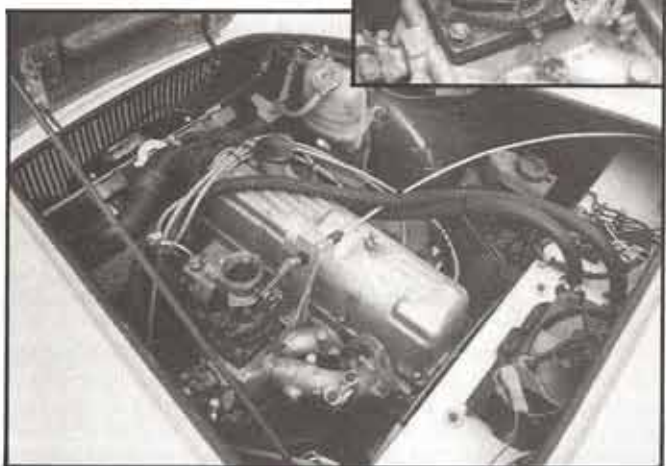
mounted battery in place, there is still a decent amount of space for loose luggage.

Stepping back to admire the car one can readily appreciate the lines that have stood the test of time while, from a distance, the Haldane looks every inch the original car.

**'though currently displaying a few faults, Brian and Alisdair are well aware of them.'**

Stepping closer, you begin to notice the small tell tale differences which ensure that this car will never fool anyone but that was never the main objective. As a prototype, the car bears the scars of all the mistakes and inaccuracies that have occurred during development and the ill fitting trim and various unfinished edges will all be taken care of but, what is far more important at this stage is how it drives.

*The 1 1/4 Fish carburettor gives about 5 bhp more while the extra bottom and mid range torque are additional benefits.*



*The engine bay offers good access to the Cortina engine while twin cams are seen as the most popular alternatives.*

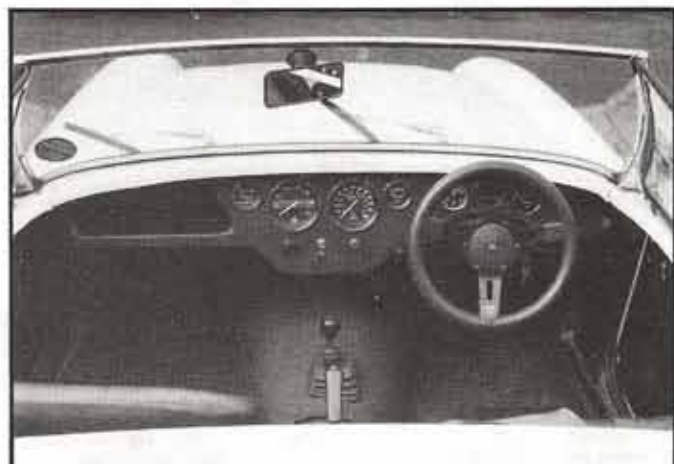
**T**he large doors open very wide to afford good access and once in the driver's seat you are immediately aware that you sit very much 'in' the car with the cockpit edge just below shoulder level. The recovered Cobra seats were very comfortable with good thigh support while the adjustment allowed a good driving position even for chaps well over 6 feet tall. Given the unique appearance of the original dashboard, the flat plank in the Haldane was a bit bland but it did house a full range of clocks courtesy of a Triumph.

It was also fitted with a pair of competition harnesses which necessitated a ten minute struggle





*Very simple to fit and very effective in use. The bottom half opens for hand signals and car park meters.*



*The current moulded fascia is a little bland while a copy of the original cut away version is planned complete with grab handle.*

in order to get the things on but mounting points for conventional cross belts will be incorporated on future chassis to make matters easier.

Reaching under the dash for the key prompted instant response from the engine which announced ignition to the world via a very aggressive exhaust note. Going for the clutch, I noticed the pedals were mounted rather high, another mod on future cars, but it was nothing I couldn't live with so into first and away. The extra torque from the Fish carb was very noticeable round the twisting roads of Blantyre and obviated a great deal of juggling between second and third while the steering was light and responsive, the brakes similarly efficient and the whole experience one to make you yearn for the open roads out of Glasgow.

With my wish granted, a good stab on the throttle had the car accelerating well but the high diff ratio (around 4.1:1) made the car slower than one would naturally expect. However, once rolling, the screen and sidescreens offered excellent protection from the

elements whilst the ride kept me well informed of all that was going on below. A few bumps caused the 185/70 tyres on 14" rims to foul the wheelarches at the front but this will be cured when the front subframe is lowered by about 2" in relation to the chassis. Coming to the first corners, the car exhibited more roll than expected, coupled with the occasional bit of bump steer but again, replacement of the anti roll bars and a geometry change to the lower wishbone mounting on the chassis will overcome these traits. Even so, cornering was an enjoyable experience with the steering working particularly well as I swung the impressively large bonnet from lock to lock through the S bends and while the roll was pronounced, the grip was good with the rear end sitting firm all the way round.

The other particularly noticeable aspect of driving the car was the smooth nature of the controls. The pedals, which will also be lowered on the next car, had a good length of travel which, combined with their light action, made the car easy to drive very

smoothly, the fluid movements making rapid progress easy.

I was hooked! My only real problem was finding somewhere to park my left leg after declutching, having adjusted the seat to suit my particular build but this too will be ironed out. (the problem, not the leg) by the planned repositioning of the footbox. That and the absence of an overtaking mirror were very insignificant gripes in relation to the enjoyment of driving the car.

Overall, it was a super car to drive and though currently displaying a few faults, Brian and Alisdair are well aware of them and I am positive that HD 100 number two will be fully sorted at which time the car will be ready for more power.

As far as the minor shortcomings of ill fitting trim and unfinished edges are concerned, these too will be tidied up while I am sure individual customers will probably go the whole hog of replica interiors and fittings.

Actually, the sidescreens fitted to the car are genuine Healey parts as will be the hood when fitted. They are very simple but very effective while the lower flap opens conveniently for car park meters and the like.

By now I'm sure that most, if not all, will have gathered that I am just a shade enthusiastic about this project, in which case you are absolutely correct and may award yourself one of teacher's gold stars. Not only is this a potentially superb car, it's almost two cars for the price

of one for by simply removing the bumpers, windscreen and standard bonnet and replacing them with aero screens and a louvred bonnet, the transformation from touring car to racing beast is easily achieved. Indeed, many Healeys featured wraparound perspex screens so with the Haldane kit and the assistance of SC Austin Healey, you can make the car really look the part.

Unfortunately, no brochure is available at present but, with all the modifications listed, the chaps have enough to do at the moment. However, they are adamant that the second car will be ready in time for the Kit Car Action Day at Knockhill circuit on 24th July so if you want to drive something a bit special, don't miss them!

In addition to compiling a brochure, they also have to finalise the kit packages and prices but, as a rough guide, the basic kit will comprise the chassis and bodysell finished in white gel coat with doors, bonnet and boot fitted, the moulded fascia, heater cover, pedal box, modified prop shaft, steering column extension, rear axle bracketry and extra rear axle locating arms all for the excellent sum of £1950 plus vat.

Some of you may well have seen the car at Stoneleigh but, if you missed it, full details are available from Haldane Developments, 265, Clarkston Road, Cathcart, Glasgow G44 3DN. Tel 041 637 2234.

*The cockpit offers comfort and space for two in the Cobra seats while the original sidescreens offer good protection from the elements.*

