Fourth six 3



To say that MG's pre war history was a confusion of model configuration and designation would be to overstate the obvious. Period press reference to MG as a purely sportscar company seemed to have more to do with the fact that Kimber & Morris were doing it for sport. The company as it grew from the Morris Garage service depot at Longwall Street to Alfred Lane to a couple of bays at the Bainton Road Morris radiator factory to the Pavlov leather works, becoming the Limited partnership of the MG motor car company at Abingdon, was never really a manufacturer. Not in the real sense of raw materials in, rolling chassis out.

Kimber had an uncanny ability to motivate automotive parts suppliers, within and beyond the Morris Motors empire, to supply and produce parts for his nineteen twenties conception of the sportsman's car. Weaving together a supply network capable of providing him the bits needed to manage a fully functional automobile assembly operation. Often on timelines so industrially unrealistic that it added to, if not created, the historic confusion over cars rolling out of Abingdon with a profusion of octagons.

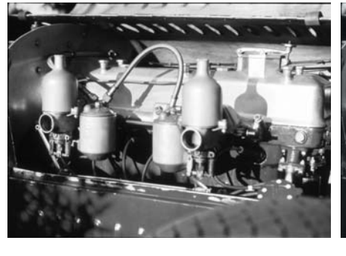
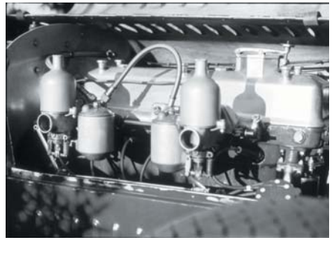
In the beginning it was off-the-line Morris cars, seen as assembled parts that were delivered to Kimber's garage. Bodies were stripped, leaf springs flattened, steering replaced, cable brake systems simplified, engines disassembled, ported, polished, balanced. All was reassembled, new bodies fit, generally at Carbodies of Coventry, interiors of leather installed. The transformed cars were rolled onto the showrooms of Morris Garage.

Yes, there were others altering the prosaic products of the British automotive industry. The results were often perhaps a bit more stylish, but none the less prosaic.

Kimber's team, two at the start at Alfred Lane to 200 at Abingdon, were doing something different. These were cars that, well, we could use the tired phrase a whole greater than the some of its parts, proved Kimber to be an astute industrial analyst. One who knew what he wanted to deliver on road and track, had built relations within the Morris group of automotive companies to have them configured, and a talented team to conceive them on one end and fit them together on the other. Kimber did have the financial backing of the man who was responsible for 42% of all car sales in the UK in the early twenties. The man who owned MG as a private concern. Bought Britain's largest car company, Wolseley, during financial troubles following the Great war with a private check. And whose main concern, Morris Motors, owned and operated dozens of parts suppliers. Still it was with a unique ingeniousness that Kimber was able to produce cars of a completely unique character.

While his MG operation anticipated, foreshadowed, or fathered if you wish, chassis design that was to become characteristic of post war British engineering, it was the engines that were to bring the laurels. The unexpected and often out sized reputation of the firm.

Engines are the heart of an automotive company. It is here that, for me, the mystery lies. When I took this project on I knew less of the engine configuration and origin than of the achievements. The victories in hill climb and in road race, the class speed records of Eyston. Class records that reshaped the definition of light car performance. The stories of young blades at the controls of early 1.3 liter Bugattis embarrassing Kaiser Prize 7 liter Mercedes are legion. Stories of lightweight and specific power pushing aside large displacement power, that defined

the evolving character of the voiturette before 1914. Yet here we have MG writing stories of sub-one liter cars setting records near or beyond 100 miles an hour at a time when 80 miles an hour was impressive for most any car, of any displacement.

My own investigation began with a search for the source of this OHC engine referred to in books like John Thornley's *Maintaining the Breed*.

It made little sense to me that a small British "garage" operation had developed an engine of such diminutive size, yet so formidable of performance and durability. Yes, I saw the industrial depth of Morris' operation behind their Oxford sales showroom, but it still made little sense because of Morris' interest in out-Austin'ing Austin (in price point), and the infamous laconic performance results of British industrial parsimony. So I went on a search in my library.

First clue, MG was 'gifted' Wolseley OHC engines for modification. OK, but I knew even less about Wolseley. After a few hours, there it was, the shadow of Mark Birkigt. Wolseley had assumed the mantle of major armaments manufacture, much like Alfa, during the first world war. And in an industrial subset had entered upon aero engine manufacture with Hispano for their magnificent V8, under the product name Viper. The numbers produced seem to have been substantial; four thousand is the number referred to. This certainly must have resulted in the Wolseley engineering and production operations reaching a high standard of manufacturing capability in the Birkigt mold.

For Wolseley to have come out of the war with an in-line OHC six, as Birkigt was producing the H6, makes perfect sense. The six's realization in a smaller displacement package targeted to a broader British price point, is also perfectly logical for the UK's largest manufacturer.

Yet, so much of Eyston's focus on record setting was with the sub-one liter engine, in displacement from 847 and 750cc to 500 and even 350cc. Where the hell did this engine come from? This was no little iron lump, evolved from automotive side valve tradition. It seemed to speak of the level of machining and manufacturing sophistication achieved by Wolseley aero engine division.

There again was research reference to Wolseley getting into financial trouble as a result of development costs of an overhead cam for general automotive use.

And yet another reference to William Morris requesting the Wolseley engineers to develop an OHC in-line four engine of sub one-liter size, for the Minor, after the acquisition in '27.

These two references I did find curious. Generally European companies, on the Allied side, got in the soup after the first war because of government war contract cancellation and the retooling lead time to serve a disorganized, displaced, disheartened, yet ironically emergent, middle class.

For a company of the industrial diversity and scale of Wolseley to get in trouble over the development of a single cam car engine seemed unlikely in the extreme. Just the fact that Morris stood up to purchase the firm with a seven hundred and fifty thousand pound check seemed to belie such a conclusion.

The latter was surprising to me. For Morris to request of Wolseley to take their Silent Six OHC and downsize it to an 847cc four-banger for Morris Motors forthcoming subcompact Minor was unexpected. This seemed industrially unusual to introduce such complexity of power to this car market price point in 1927. Long road for an economy of scale. But Morris was running Wolseley as a privately held concern (much like MG), and not as of yet folded into the Morris Motors fold. Admirable, daring, but unusual.

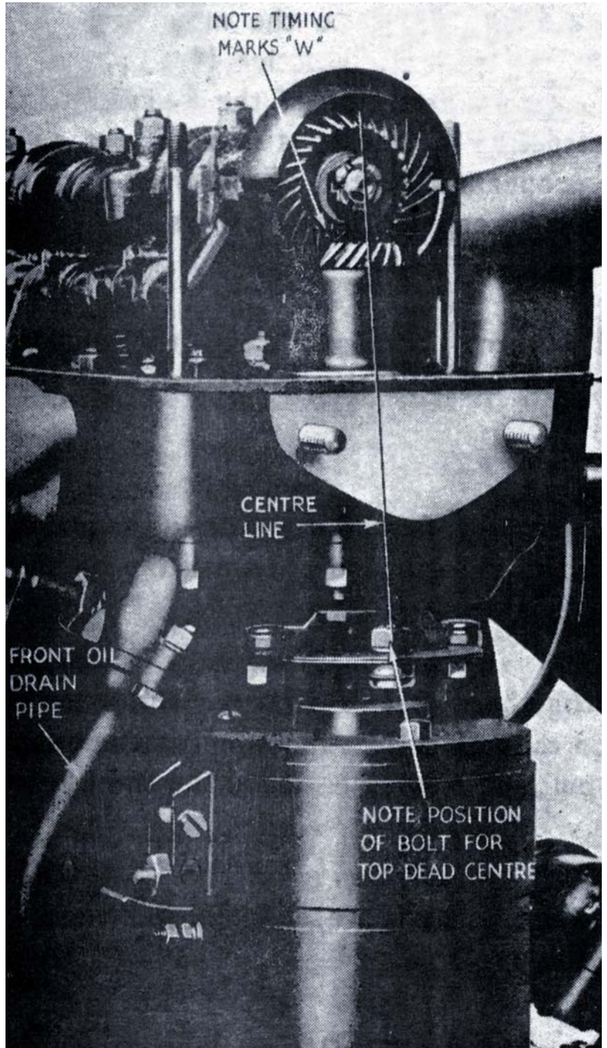
A search for the designer may uncover other influences in the decision. Because, it was a hell of a decision for Kimber and the MG reputation. And what were the influences that resulted in the NB six engine by 1935? I felt certain H. N. Charles fingerprints were on this deal, but where? And how early in the chain of events? And within this complex weave of British suppliers, did Kimber really have the pull to order individual specification engines on a limited production basis from Wolseley? Or from the casting operation that supplied Wolseley?

My first call was to Mike Cook. Mike having extended his help in the past regarding all things British.

"Hello, Mike? Scott Callan here. How are you?"

"Good Scott. Good to hear from you. What are you working on?"

"Doing a book on an MG. An NB to be precise. Which brings me to my call.



"Do you have any pre-war MG material in the archives?"

"Afraid the archive is focused on the post war period. But what are you looking for?"

"Information on the engines. I see they were overhead cams. Trying to find out who designed them and where they were made."

"They didn't make their own. I'm sure they were sourced within the Morris group at the time. Now that I think of it, they were Wolseley's weren't they?"

"Seem to be. But I've found no reference to who actually designed them. Just trying to give credit where credit is due. And find out more about their development.

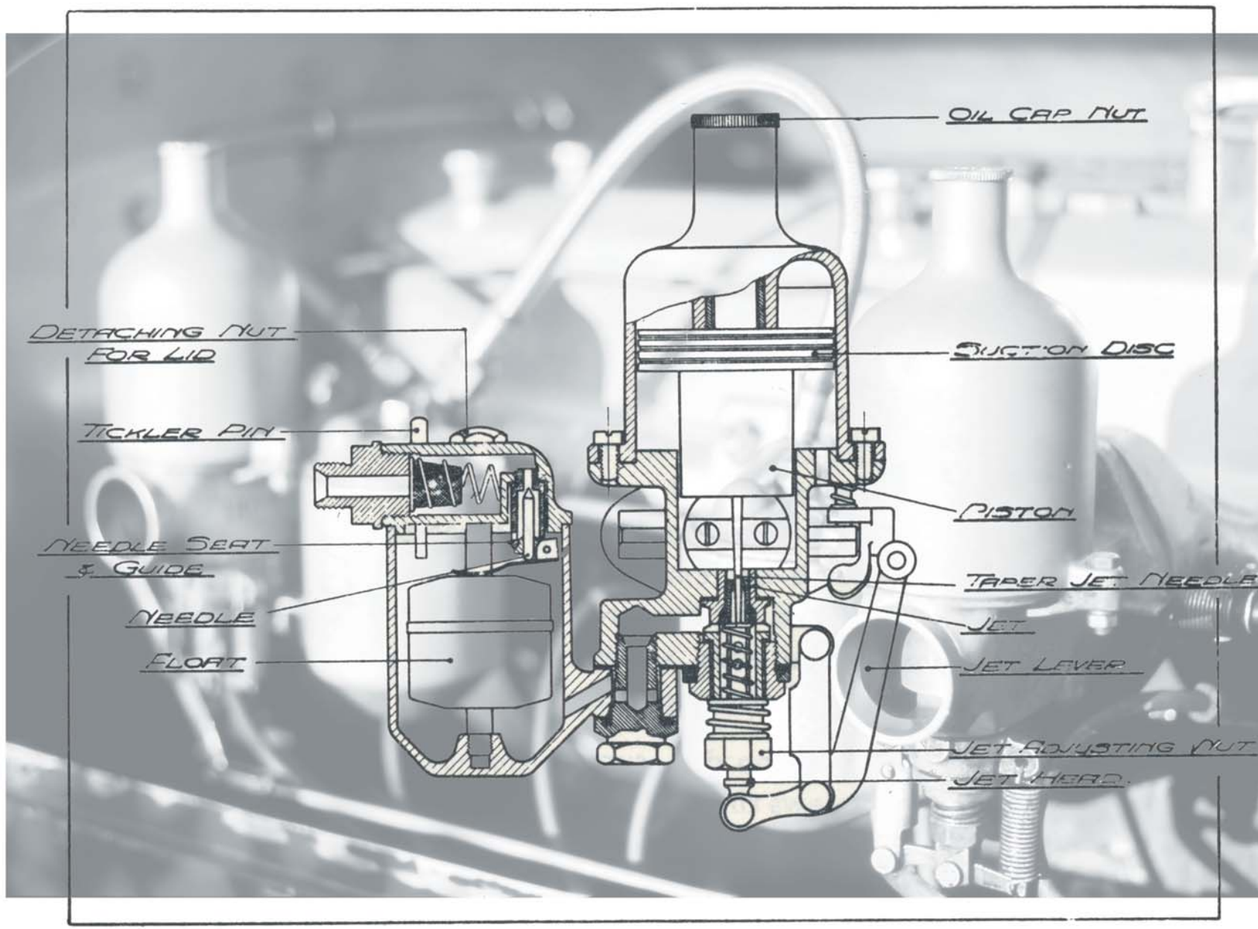
"Just find it curious that an economy car operation like Morris's would go to the expense of designing, developing and tooling up to make a sub-one liter overhead cam."

"Does seem unusual doesn't it.

"You know who you should contact, Bill Price. And I think Graham Robinson may have written a book on Wolseley. He's written a book on most everything else."

"Wait a minute? Graham Robinson? Sounds familiar." I turned in my chair, gave a quick scan of the book shelf.

"Thought that sounded familiar Mike,



I've got his book on Cosworth.

"I'll e-mail their contacts in a few minutes."

"Thanks Mike. I appreciate the leads."

"Let me know if I can be of any further assistance. And keep me posted on progress."

Not ten minutes had passed before the computer whispered a chime and an envelope appeared on the lower status bar. When I opened it there was Mike Cook's note with Bill Price and Graham Robison's coordinates. When I hit send the phone rang.

"Hey Dad!"

Always a bright spot to hear Miles voice on the phone.

"Hi Hon, what's going on there?"

"I just ran into Terry, the guy that does the MG restorations in the next building.

"I got talking to him about your new book and it turns out he has an MG NA that he just finished restoring. He said if you had any questions about it he'd be happy to do an interview."

"Great idea. I'll put together some questions and e-mail 'em.

"When do you think he'd be available?"

"Probably tomorrow if you want. He said he'd be around for the weekend."

"Sounds great. I'll get them off to you in a few minutes."

So I sat and clacked out an e-mail of the questions for Miles' interview with his neighbor Terry.

That night Miles called to tell me he'd sat with Terry.

"So did you record the interview on your computer?"

"No, I transcribed it while he spoke."

"Really?" My pride was mixed with amazement at his developed typing skills.

"I look forward to reading it."

The next morning I received this attachment.

"Where was the H-S Wolseley engine factory located?"

"Probably somewhere around Oxford."

"What quality was the Viper engine?"

"The overhead cam Wolseley engines were, I would say, very well designed. The boys in England are still racing them, they have tooled up and are making new blocks and head from the NE design.

"It was a unique engine with the generator mounted vertically as part of the camshaft drive. It was a typical early thirties with poured bearing(s.) The block itself is (a) very lightweight iron casting. The oil pan was made from magnesium alloy. You would have expected it to be aluminium, but they used the alloy of magnesium to make it lighter.

"MG got it from Morris, when they came out with the Minor, that had the same engine. MG adapted the car and engine to make the M type which became a real popular and cheap sports car. They sold about 3,000 (Midgets). In the early thirties they just about used up the alphabet making one new model or another."

"As Vittorio Jano was responsible for design and the Alfa experimental department the engineering for all Alfa engines from 1923 to 1938, who was responsible for the design of the 847cc SOHC & silent six SOHC engines at Wolseley? Or because of the date of design, who inside Morris was responsible for the Silent Six following the acquisition of Wolseley?"

"It predates my knowledge."

"In the case of the Silent Six, after Kimber saved the three Wolseley / Morris prototypes and their engines from the scraper who was responsible for their redesign and reengineering at MG."

"It was probably H.N. Charles."

"Were the 847cc engines cast by Wolseley / Morris, then shipped as unfinished block/heads to MG? "

"Done at the Wolseley factory."

"How much engineering and fabrication was actually going on inside Abingdon? (Complete rolling chassis to body design, fit and finish?)"

"All the design of the cars were done at Abingdon but all the parts were done at the other parts of the Morris empire, and put together at the Abingdon plant. The assembly of the cars was moved by hand down the line, this practice continued to 1980.

"Miles, you have to remember Cecil Kimber was taking heavy clunkers and turning them into hot rods and Mr. Morris saw what impact it was having on sales. Not only of the MG, but on Morris in general.

"Here's some information on the car your Dad's writing about. The Iona Special was owned by David Raymond until he died and was sold. Looks like it has Engine number 1035-AN. The triple M register number is #866."

"What was the metal compositions of these engines?"

"Cast Iron Block and head and magnesium alloy oil pan had one of the first oil filters and water pump. Cast Iron Cylinders, Cast Iron Crankcase. Aluminium cam covers."

From here it seemed obvious Terry had ranged onto the subject of MG history and competition for Miles benefit. The transcription here reflects attentive interest and a cliff's notes keyboard style.

"The Factory had a racing dept. and I'm sure they tapped into whatever they needed in the Production areas to get what they needed to build the racecars.

tazio nuvolarui also drive in the irish races in 33-34 in a K3 MG. The nextyear they outlawed superchargers, so they used the NA chassis unsupercharged and they still won. NE chassis. Pete DeLander in LA owns one of 7 existant one. Probably races against Iona Special. Nulalari painted his MG italian red, he still has his car still painted the original red and races it at Laguna Seca and Sears Point."

I sat back and lit a Camel and marveled at the happenstance of it all. But, then again Miles lives in an old boat yard / marina where half the building are occupied by car guys and the other half by artists. From the sound of it, guess that would be all of the buildings have artists in them. Shaking my head, smile in place, Outlook started to ping.

e-mail from Mike Cook's buddy Bill.

Hello Scott

I admit I do not know much about pre-war MG's. However, in answer to your question I suggest that you contact Mike Allison, who collaborated with Peter Browning to write The Works MGs book. He is an authority on pre-war MG's (but I suppose you know him anyway). He can be contacted as follows:

His hearing is not good according to Peter Browning so a phone conversation might be difficult.

Secondly, I suggest you contact Bob Montgomery at the Royal Irish Automobile Club who runs their archive. Very nice man who I am sure can help with source of photos etc.

Let me know if you require further help

Regards, Bill Price

Ping.

Dear Scott,

Sorry, I am not going to be able to help you.

1) I know of no-one who will have pictures of those 'Irish races' - especially as you do not specify which races those actually were. It all happened a long time ago and, by definition, anyone who saw/competed in those early races would now be in their 80s.

2) I have never written, or even attempted, a book about Wolseley.

Sorry - so very sorry.

GRAHAM ROBSON

Seems hard to believe that Graham hadn't written a book on Wolseley. Must have an entire automotive library shelf to himself by now. Probably what Mike Cook thought.

Another ping. A note from Terry Sanders, Miles' neighbor.

Hi Scott, enjoyed talking to Miles about the project. I've been into MGs ever since I part won a TD while in college in the late 50s!

I've been fascinated by the prewar MMM models and finally was able to get a 1934 MG NA for myself. After a 12 year reassembly, its ready for the road but alas I know little of Wolseley. I'll happy to share what knowledge I have of MG with you and can recommend a couple of avenues for you to pursue:

You might find some Wolseley experts at http://www.triple-mregister.org/forums/default.asp

If you register, you can ask questions....this is where the most knowledgeable MMM men hang out.

You might also contact Mike Allison who started the MMM Register and worked at the factory and knew Charles et al personally. Tell Mike I sent you....he used to be at this address: but I seem to remember reading some where that he had changed his email address....I'll try to find that reference.

Best Regards

Terry

The second Mike Allison referral. Looks like it's time to craft a note. The questions were brief. Composed like an interview, with invitation for further comment.

Who designed the 847 engine for MG?

Where was this light-iron engine cast?

Were these castings delivered to Abingdon where they were finished, ported, polished, assembled, balanced?

Who was making the cams, cranks, valves, etc.?

Now within this period we have HN Charles entering MG.

Following this, did Charles design all of MG engines, chassis and components?

Were all these engines, chassis (frame and suspension) & components designed by Charles at Abingdon, then manufactured by Wolseley and delivered to MG for final machining and assembly?

What was the timeline for Abandon's evolution from modifier and assembler to manufacturer?

For example, when did they take on the casting of engines? Or did they?

Was HN Charles responsible for the design that took the 847 four to the 1200 six?

Was the latter purely an MG engine?

Or was this a shared bottom end and block shared with the Wolseley Viper?

(Am I correct in noting that the Wolseley Viper didn't have the cross flow head?)

By the time the N was made, how much raw material to finish product manufacture was going on within Abingdon?

Within a few days curiosity and patience were repaid with generosity.

Scott, In reply to you E-mail:

> Refer to my book, "Works MG", published by Haynes, 2000. Currently being reprinted, due for release May 2011.

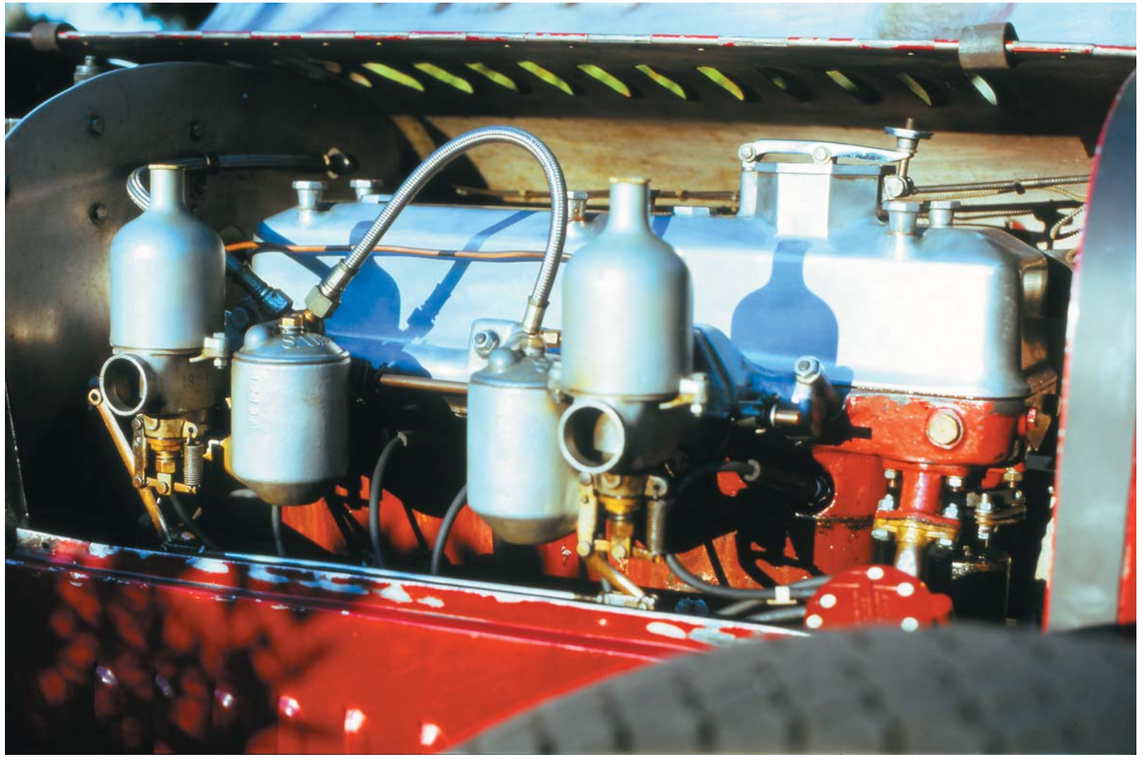
> MG was always an assembly plant using parts supplied from the Morris Motors empire, although initially it was wholly owned by Sir William Morris. Sold by him to Nuffield Industries in 1936.

> All engines were built up at Adderley Park, by Wolseley Motors, but after 1930 to the specific requirements of MG Car Company.

> H. N. Charles became Chief Engineer in 1929, and his Development Engineer was R. C. Jackson, also widely referred to as the Chief racing mechanic, which although correct in fact, not so in title!

> All parts for Wolseley were made in house, although casting was carried out by sundry suppliers, mainly Qualcast of Birmingham. Wolseley had very good machine facilities right up to the closure of the plant in the 1980's.

> Wolseley had a great turnover of engi-



neers, and, as ever, it is entirely wrong to attribute good or bad design to any one of the Chief Engineers.

> Although the basic design of the ohc engine can be traced back to the First World War, this is a facile view. The whole layout of the car engines started in 1922, and was developed throughout the next ten years.

> MG only worked on customer engines, for which the customer was expected to pay: this was still the rule when I worked there in the sixties and seventies! If work was done, it was by Jackson and his team. Standard engines were fitted to all production cars, and some went well from new and others did not. It was Jackson who maintained, however, that the main cause of poor running or results was usually "the nut holding the steering wheel!"

> Chassis, body and steering layout were all due to design instigated by Charles, who was a brilliant engineer… one of the best of his day.

> Charles was NOT responsible for the movement to the six! MG was sold an obsolescent batch of Hornet engines which were incorporated into the Magna. However, his work on the cross-flow head did lead to the K and L series engines, and so onto the P-type Midget.

> Photos are held on file by British Motor Heritage, of which copies may be purchased.

> The Evans family archive was all bequeathed to the Brooklands Museum, but I do not know how accessible this is. I knew Kenneth reasonably well, and met Doreen once… I also knew Wilkie very well.

Michael Allison 2010

These answers from this source were most appreciated. MG had presented an interesting puzzle in that its racing achievements and reputation were far outsized for a source & assemble operation. Mike's comments put much of this in perspective. It also provides a basis from which to proceed to the discussion of the N series, the fourth six.

MGs first overhead cam six was the 18/80 Mark I. There was the previous Mark IV with its Hotchkiss side valve six, but of no concern here, and barely any back there. The 18/80, with its two and half liter displacement reached its maturity in the Mark III, which in classic MG naming convention or confusion of terms, was also known as the B-Type and Tiger or Tigress. The decidedly up-market Mark I through III was available in thirteen different models. Not really the definition of economy of scale.

The development of this OHC six stands as fine example of Kimber's influence within the Morris structure, which enabled him to produce the sportsman's type of cars he wanted.

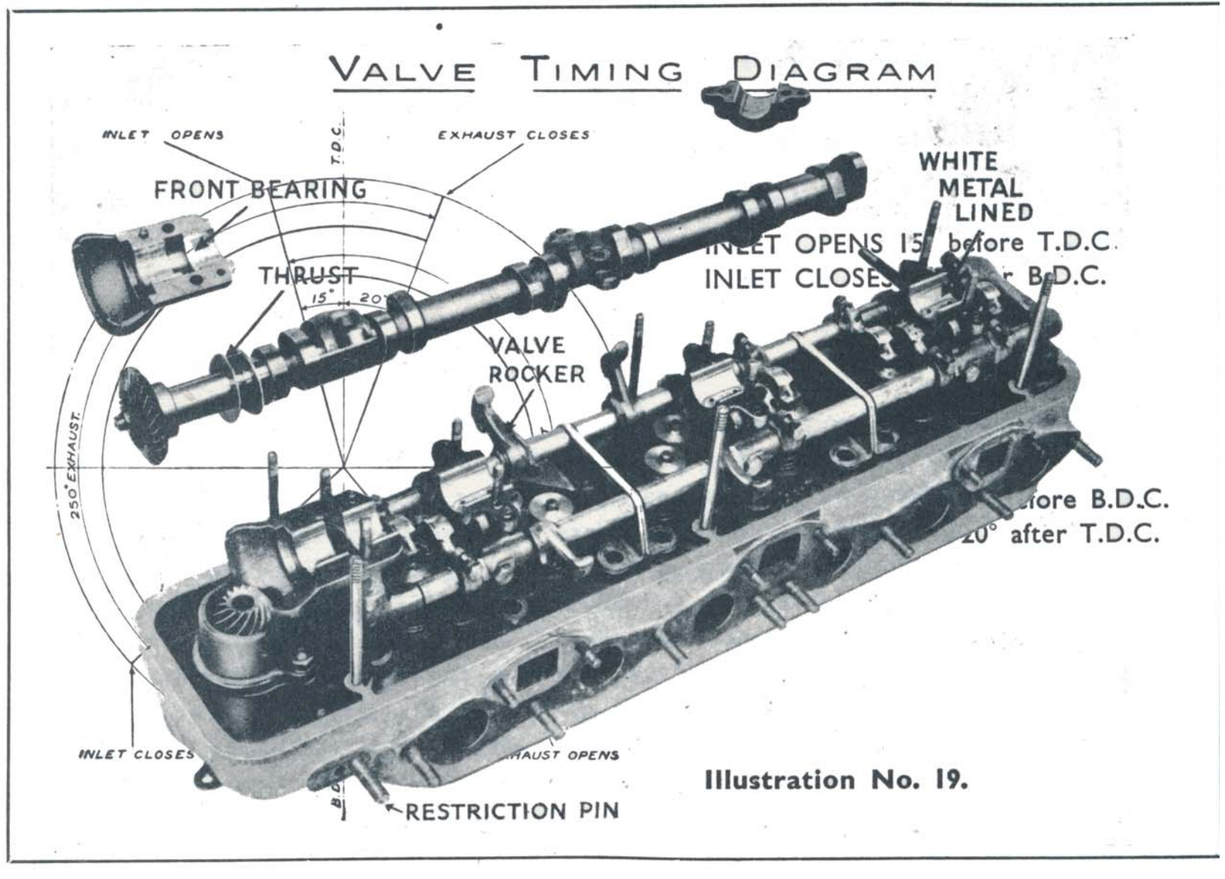
Early in Kimber's career Frank Woollard brought him on board at steering gear, transmission and axle supplier E. G. Wrigley. In 1923 Kimber repaid the favor. Morris had just bought the Hotchkiss works in Coventry and was transforming it into Morris Engine Branch. Kimber suggest Woolland for GM, Morris accepted. A few years later Kimber, in friendly conversation with Woolland, suggested that perhaps something better than the Hotchkiss could be produced. Woolland put Morris Engines chief designer Pendrell on the case.

Morris Motors, for their part, underutilized the new Morris Light Six. In three models of dubious quality and questionable mechanical composition, the engine looked to achieve little. Until of course Kimber took one of the 1927 underachieving varients back to Morris Garages. Here it was stripped it to the ground and rebuilt with quality brakes, steering and suspension beyond the Morris Motors price point. All done in a manner that turned porcine ineptness into svelte competence. And in a final, at least here, note on the Kimber influence, the MG light six had a completely new block with intake tracks for a twin carb set up. This was mated to a new head. These evolutionary performance modifications to Pendrell's superby engineered chain drive single cammer could have easily been referred to as the series two JA-type. But it was referred to as the MG Sports Six.

The second six in the Morris pantheon to find its way beneath an MG badge was the previously mentioned surplus Hornet 1271cc sixes.

Once mounted in Abington chassis, these engines were festooned with trappings of the MG identity, from cast logos to sheets of steel, to hide the obvious. This bit of brand badging became the unheralded Magna.

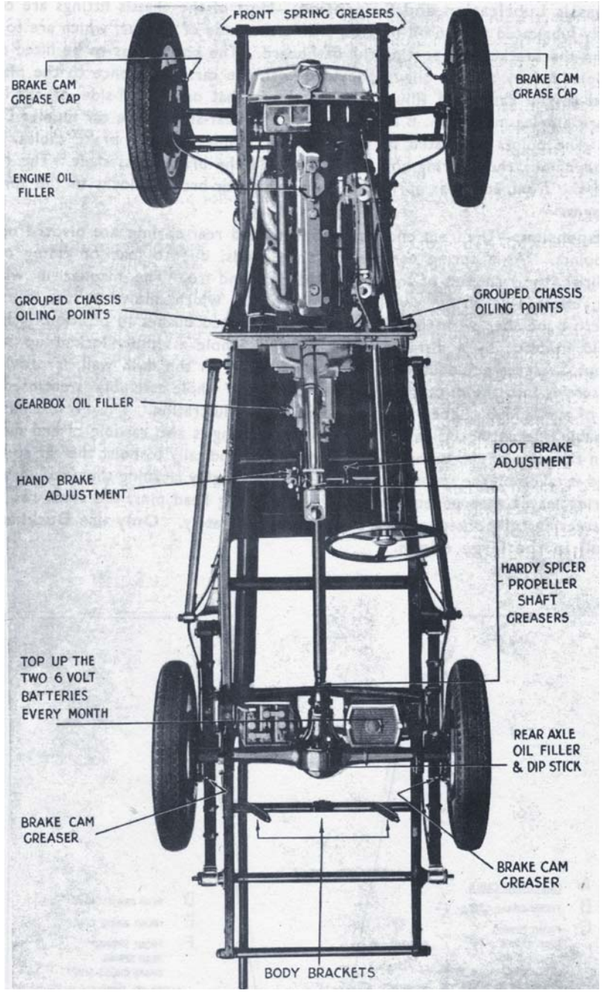
The third series six was not to suffer ignominy. In pursuit of supercharged power beneath the categorical judgment of the handicappers, H. N. Charles modifications of the Wolseley Hornet were to transform the prosaic into the vital. Keeping with the competition reference



here, we'll move beyond the KA, KB & KC engines and focus right on the K3. Summating the entire new Magnette line into a simplified observation, Charles destroked the Hornet engine to 1087cc, fitted it with his new cross flow head, magneto and pre-selector gearbox, and on the K3, a supercharger.

From its team prize at the 1933 Mille to Nuvolari's win at the TT, the K3 had written a rich history across every sporting page from Italy to Ireland. It's sales were not so richly written. Which bring us to the fourth six.

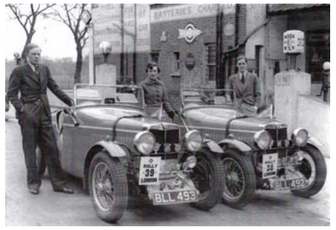
For the sake of simplicity, rather than Concours fender pedantry, we'll point out that the KD engines were not destroked, displacing 1271cc, basically. The qualifier at the end there implies another Morris Wolseley conundrum. While the K series engines were made at the Wolseley facility they were of a much higher standard. This became even more pronounced when the Wolseley engine went to a chain cam drive, which did no favors for its reputation. So to separate the MG and Wolseley engines in the public mind, an inch of stroke was added to the MG, brining it up to, a product differentiating, 1287cc.



So in the N Type we have a further evolved version of the KD, matched to fully refined versions of most every component in the Kimber approved Morris galaxy, resulting in arguably, MG's best sportsman's road car ever to come from Abingdon.

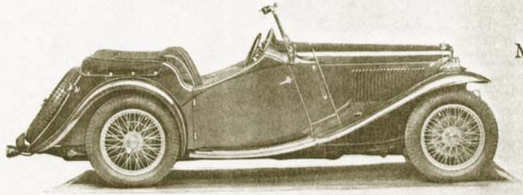
Never able to leave well enough alone, the NA Magnette became the NB in 1935. This coincided with an event that would lead directly to the Iona Special. The most prominent road race in the British Isles was the Tourist Trophy. For 1935 superchargers were banned. Perhaps done by the RAC out of sympathy for handicappers caught out so often during the supercharged era.

With this as requirement, Kimber, Charles and Jackson looked about and placed their new sportsman's car in the ring and returned with Irish laurels. The N proving to be well mannered and a capable platform for further modification.



Here is where Mac bought N0774, as a rolling chassis, at the Bellevue Garage. Located at Brooklands, the Bellevue was owned by the Evans family. Here we see Team Evans, the kids, Doreen, Dennis and Kenneth.

"THE AUTOCAR" ROAD TESTS



M.G. MAGNETTE TWO-SEATER

No. 886 (Post-War Series)

Latest N Model a Delightful Car to Handle

WHEN one has had a car in one's care for several days, driving it under the assortment of conditions represented by town traffic, pottering on by-ways, with an occasional steep hill or two, and leavened by sections of good, fast, main-road running, and then, finally, when one has taken the same car to Brooklands and tested it for maximum performance, there is a good basis for fair judgment to be passed. The opportunity is all the better when, as in the case of the M.G., it has been possible in the course of time to follow the successive stages of development through the various models, with plenty of practical experience of their behaviour.

So it is with the latest N Magnette that one comes to it knowing the characteristics of the marque, but naturally expecting to find the most recent model an improvement. Even so, one is not prepared for the very great advance which the N model shows as against earlier types of M.G.s of approximately the same size.

It is not just that the car is fast—its true potentialities in this direction are not easily appreciated until it comes to be taken to the track; it is that it *feels* so very much better. Speed is one thing, and a matter of importance, perhaps sometimes overrated, to some people; but vastly more important is the manner of a car's behaviour. For, as a rule, it is likely to be driven even by an enthusiastic owner at speeds nearer 50 m.p.h. than its maximum, and the greater part of the joy of owning a real sports car lies in the more normal handling of it.

Acceleration, certainly, is essential to this kind of car, to give which, with a not big engine, revs are the vital essence, and those revs must be maintainable without any suggestion that something is going to break. This engine seems veritably to delight in revs, yet it remains delightfully smooth and quiet, and feels so remarkably happy that the driver quickly gets into the habit of revving "for fun," thereby obtaining a vivid performance.

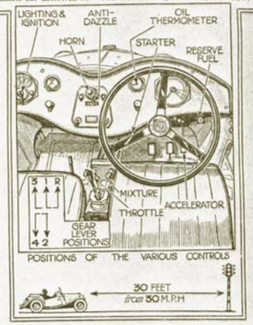
M.G. MAGNETTE N TWO-SEATER

DATA FOR THE DRIVER

12.08 h.p., six cylinders, 57 × 84 mm. (1,287 c.c.). Tax £12.
Tyres: 4.75 × 18in. on knock-off wire wheels.

Engine—rear axle gear ratios.	Acceleration from steady speed. 10 to 30 m.p.h.	20 to 40 m.p.h.	30 to 50 m.p.h.	Timed speed over ¼ mile.
21.5 to 1	—	—	—	
11.9 to 1	5½ sec.	—	—	
6.98 to 1	9 sec.	9½ sec.	11 sec.	
5.125 to 1	13 sec.	14½ sec.	16½ sec.	80.72 m.p.h.

Acceleration from rest through the gears to 50 m.p.h., 16½ sec.
Acceleration from rest through the gears to 60 m.p.h., 22½ sec.
Speed up Brooklands Test Hill from rest (1 in 5 average gradient), 19.37 m.p.h. (on first and second gears).
Acceleration up 15 yards of 1 in 5 gradient from rest, 3½ sec.
Turning circle: 30ft.
Tank capacity 10 gallons, fuel consumption 24 m.p.g. (approx.).
12-volt lighting set; 8 amps. at 40 m.p.h.
Weight: 18 cwt. 2 qr.
Price, with two-seater body, £305.
(Latest car described in "The Autocar" of March 16th, 1934.)



It must not be supposed from what has been said that it is a sixty- rather than an eighty-mile-an-hour car; the distinction lies principally in the road and opportunity available. It is not surprising that with the makers' knowledge of racing, and with the 1,287 c.c. engine that the N Magnette has, it should be capable of giving as high a speed as 80 m.p.h. What comes as a revelation is the ease with which on Brooklands that speed is reached and held, the rev needle hovering between the 5,000 and the 5,500 marks, the whole mechanism feeling as one, and with no sense of adventure attached to such speeds.

It is a sports car, yet it is not harsh in its riding, wherein the use of hydraulic shock absorbers for the back axle no doubt has some considerable effect, the frictional type being retained in front. It is not noisy, either mechanically or in the exhaust; with the same setting of shock-absorbers, the same tyre pressures, and without change of any kind being made anywhere, it is a car perfectly suitable for ordinary running about, for conveying, for instance, an elderly passenger around the country, yet immediately afterwards, and without factory experts being in attendance, the car can be put over the half-mile and record close on 82 m.p.h. (81.45 m.p.h. actually). This was given as the best figure on a practically calm day, with the windscreen lowered but with the normal full equipment in place, the driver only being on board. The best timed speed over a quarter-mile with the windscreen raised normally was 76.27 m.p.h.

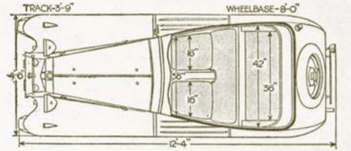
On a suitable safe road, with the screen in position in the ordinary way, 75 m.p.h. is a speed which can be got up to with ease and considerable satisfaction. With quite ordinary methods, and changing up fairly early, 50 is registered almost automatically; the way in which the car runs at this speed makes it delightful to keep up, practically irrespective of bend and curve, so rocksteady is the car on the road.

(Continued on page 4.)

"THE AUTOCAR"

M.G. MAGNETTE TWO-SEATER

(Continued from page 2)



But the difference compared with most ordinary cars is that, when it is wanted, there is instant acceleration available from that speed onwards on top gear; or, better still, of course, with a quick drop down to third—a movement of sheer joy to the practised driver with the latest gear box, the revs being taken right round to the "five-five" mark if he so chooses—almost exactly 60 m.p.h. on third gear.

To pass, or to climb really fast, in this way is an experience in motoring which is difficult to excel; the whole running of the car spells efficiency, and, a good point on this N model, there is no ostentation about the exhaust note. Actually, 6,000 is not by any means an unheard-of figure with this engine, but the red marking on the dial leads one to treat 5,500 r.p.m. as a usual limit, which gives 36 m.p.h. on second, and just over 20 on first gear.

The big dial in front of the driver is essentially a rev counter, an intelligent instrument for the owner of a car such as this, but there is an inner ring of readings on which are plotted the equivalent speeds on top gear. The instrument proved very close to accurate in its speed readings, the maximum m.p.h. figure during the fastest timed run being 83 or so.

Apart from the performance, the most striking thing about the car is its feeling of solidity without, however, seeming "dead." One soon has the feeling of being able to do almost anything with the car on corners. This, and the acceleration, coupled with brakes having big drums of racing pattern, which do their job really well, yet never give the impression of being fierce, make high average speeds a matter of course when required.

An excellent angle has been given to the steering column, the wheel comes in an ideal position for power of control over it, both arms being inside the body of the car. Though very light, the steering is properly accurate. The seats themselves are very comfortable.

Behind the seat there is a genuinely useful-sized compartment for baggage. On the chassis one outstanding provision is a system of grouped lubricators which, communicating by pipe lines to various bearings, reduces lubrication almost to a pleasure.