## Maudslay (1902-1923)

**Built: Coventry, Warwicks**

MAUDSLAY had originally been an engineering company, but built a variety of medium and large-sized cars until the first world war. There was then a gap before an advanced twin-camshaft 15/80 six-cylinder prototype appeared in 1923. It never went into production, and Maudslay then concentrated on the manufacture of commercial vehicles, until they were taken over by the Standard Motor Co.

## Morris (1913 to date)

**Built: Cowley, Oxon, and Longbridge, Warwicks**

ALTHOUGH the first Morris car was not sold until 1913, William Morris had been in business on his own account since 1892 in Oxford. At first he repaired, then built, pedal cycles, but soon he began servicing and selling cars, and 'The Morris Garages' was well-known in the city by 1910. Soon, however, Morris decided to start building cars, pitched at the down-market, popular-price level.

His original machines, built in a converted military training college at Cowley, were almost entirely 'assembled' cars using proprietary parts, notably White & Poppe engines supplied from Coventry. The first Morris was the 'bullnose' Oxford (so called because of the shape of its radiator, and the badge it carried).

During and after the First World War, Morris also evolved the Cowley model, with imported American Red Seal Continental engines, but soon afterwards he got his chief designer, 'Pop' Landstadt, to copy the engine, and bought the Hotchkiss factory in Coventry to build the engines. It was not the engineering of his cars, however, but his pricing policy which first made Morris famous in the Twenties. There was a post-war economic slump in 1921, which caused Morris's cars to pile up unsold. His response was not to cut production, and sack labour, but to cut prices, and build more cars! It was a policy which worked remarkably quickly for, from 3076 in 1921, Morris sales shot up to 20048 in 1923. It was the start of a vast expansion which was to continue through the inter-war years.

Much of the expansion, however, was by acquisition, for in the Twenties Morris took financial control of firms like Hollick & Pratt (body builders), Wrigley (back axles), Osberton (Radiators), and SU (carburettors), all of which he then converted to satellite suppliers of parts for assembly at Cowley, which was beginning to expand in a higgledy-piggledy way. In 1923, too, the first special sports cars from Morris Garages (called MGs) were built, and from 1926 he personally took control of Wolseley, the bankrupt Birmingham-based car maker.

Morris's amazing success in the Twenties was founded on two basic designs — the Cowley/Oxford model (which progressed from being a 'bullnose' in 1926, to the less distinctive 'flat nose'), and the arrival of the tiny Morris Minor in 1928. Two six-cylinder models, produced in 1923 and 1927 respectively, were unsuccessful, and it was not until the beginning of the Thirties that Morris truly began to diversify.

In the meantime, the satellite system worked very well, especially as a whole range of 102mm stroke, side-valve four-cylinder and six-cylinders were being developed at Morris Engines in Coventry, and Wolseley's expertise in engine design produced not only the power unit for the Minor, but a series of engines for the MGs being built at Abingdon. Surprisingly enough, there was little obvious rationalisation of Wolseley models until the early Thirties.

In the early Thirties Morris was hit harder by the Depression than its great rival, Austin, with sales slumping from 64,000 in 1929 to a mere 44,000 in 1931. Not only better cars, but a wider range of cars, were needed for future years. Sir William (who had been knighted in 1928) tackled this in two ways. He set his engineers to producing a wide range of cars using the '102mm stroke' engines, the most important of which was the 10hp model which arrived in 1933, and he brought a young production engineer called Leonard Lord in from Wolseley to transform Cowley into a modern plant. Lord had enormous energy and talent, but an abrasive personality, so perhaps it was inevitable that he would one day quarrel with his chief: in 1936 he left. Less than two years later he turned up at Austin as works director, was chairman by 1945, and eventually returned to Cowley in 1952 as chief executive of the new BMC group.

Under Lord, Morris was not only modernised, but the Nuffield Group was set up, with Wolseley and MG being brought into the corporate net, though continuing to be built at their own separate factories. Wolseleys soon became badge-engineered Morris models, and the range stretched from 8hp (RAC rating) to 25hp, with perhaps seven separate Morris, and six separate Wolseley ranges all closely interlinked.

Rationalisation, too, included the supply of bodies in bulk from Pressed Steel, whose factory was just further along the road from Cowley, but quite independent until bought by BMC in 1965. Morris, whose chief had become Lord Nuffield in 1934, was under much pressure from Ford by the mid-Thirties, but struck back with very successful cars like the Morris 8, the Series II and II 10s, 12s and 14s, and also had big six-cylinder models as well. Engineering was always conservative — no Morris had independent front suspension before the Second World War, and side-valve engines and three-speed gearboxes were also normal until 1937-38. The larger cars were usually conventional four-door saloons, but new short-stroke engines came along in 1938, and there was the unit-construction body/chassis of the 1939-model 10 to show that the designers were not completely behind the times. Production approached 100,000 a year before the Second World War.

The Nuffield Group was extremely busy during the war, making all manner of military machines, including the manufacture and major repair of aircraft, so it was not until 1948 that the first true post-war Morris models came along. In the meantime Lord Nuffield, who was 70 in 1947, was faced with extra complications, for assembly of all Wolseley cars was moved down from Birmingham to Cowley (which acknowledged how close these cars had become in design to Morris models), while preparations were also being made for Riley car production to be moved from Coventry to the MG factory at Abingdon.

Morris's immediate post-war best-seller was the attractive Morris Minor, which had been inspired by Alec Issigonis and Nuffield's Vice-Chairman, Sir Miles Thomas, during the war (it was originally called Mosquito). Although it lacked performance, for it eventually used the old pre-war side-valve engine from the Morris 8hp range, it had a roomy and light monocoque body shell, and outstanding roadholding for its day, helped by its torsion bar independent front suspension. Soon there were saloon, estate car,


**The original Morris Minor broke new ground for Morris Motors as it was the first overhead cam Morris and the first to have wire wheels, coil ignition and a dry-plate clutch as standard**

**Issigonis' masterpiece, the much-loved Mini, which survives into the Eighties**

van and pick-up versions. It was uprated to become the Minor 1000 in 1956, and sold strongly to 1971, by which time about 1·5 million examples had been made.

The Minor had arrived in 1948, the same year in which Morris launched the new Oxford model, which looked rather like the Minor but had a larger body shell and a new 1·5-litre side-valve engine. There was also the Morris Six, a long-wheelbase version of the Oxford monocoque shell, but fitted with a Wolseley-inspired overhead camshaft six-cylinder engine. The closeness of Wolseley to Morris was emphasised by the launch of 4/50 and 6/80 models using the same basic structure and suspension, but in the case of the 4/50 with a different overhead cam engine.

Production boomed and profits rose rapidly in the 1948-51 period, but Nuffield merged with Austin in 1951-52, and a new corporate policy soon emerged. Lord Nuffield retired at the end of the first year, and it was soon apparent that Austin components and designs would eventually be standardised into future BMC models.

The first car to benefit from this was the Minor, which picked up the little overhead valve engine and gearbox from the Austin A30, but in 1954 the new Morris Cowleys and Oxfords were also seen to have BMC B-Series engines. The bodyshells, however, were still Cowley-styled and Morris-badged, and were constructed by Pressed Steel, just across the road. Like the earlier generation, too, there was a long-wheelbase, six-cylinder version of this design, called the Isis, but fitted with the new BMC six-cylinder overhead valve engine (as also used in the A90 and before long in the Austin-Healey 100 Six sports car).

That, however, appeared to be the last independent design fling for Morris, for a tentative attempt at a restyle for the Morris Minor eventually went on sale as the Wolseley 1500 built at Cowley. In 1959, for instance, there was a new Morris Oxford — the third post-war series to carry that title since 1948 — but it was no more than a badge-engineered version of the Farina-styled Austin A55.

In the same year, rationalisation worked the other way, for when the new front-wheel-drive Austin and Morris Minis were launched, it was fairly clear that the cars had been styled at Cowley on familiar Morris lines. The Mini saloons were made in so many locations, and with so many different badges, that identification became almost meaningless, but even when 'Mini' theoretically became a separate marque at the end of the Sixties, most people still insisted on calling the car a Morris.


**Morris turning point was the dropping of the famous 'Bullnose' radiator to allow more 'modern' styling. This was undoubtably influenced by American design, most noticeable on coupé models. This Cowley four-cylinder model has attractive folding roof.**

It was even more satisfying when the next generation of transverse-engined front-wheel-drive cars, announced in 1962, began with the Morris-badged 1100, though Austin, MG, Riley, Wolseley and Vanden Plas versions soon followed. Just to see fair play, however, when BMC introduced their Oxford replacement, the front-drive 1800, they called it an Austin at first, and the Morris badge came along later. By the mid-Sixties, indeed, the name on the badge of any BMC car had lost its significance and meant little outside the needs of marketing convenience: one could say that the only true Morris to survive this was the Minor 1000. A 'Morris', in effect, was any car built at the Cowley factory, which from time to time embraced runs of MG, Riley, Wolseley, and even Austin models!

After the formation of British Leyland in 1968, the new management team made haste to produce a new conventional model, effectively to take the place of conventional front-engine/rear-drive saloons like the Austin Cambridges and Morris Oxfords of the Sixties. The new car, coded ADO28, was engineered mainly at Cowley, with bodies tooled and built at the Pressed Steel plant, and was finally launched in 1971 as the Morris Marina. Even so, it was sold in North America as an *Austin* Marina. At first there were two-door coupé and four-door saloon Marinas, but over the years an estate car and light commercial vehicles were also developed.

The Marina sold in hundreds of thousands but was not replaced until it was updated in 1980. The basic design which, incidentally, had always included the torsion bar front suspension of the Morris Minor 1000, was restyled at front and rear by the Italian firm of Ital Design, so perhaps it was logical that the revised car should become a Morris Ital. Production of this car, in fact, was transferred from Cowley to Longbridge in mid-1982, to make room for the new Austin Maestro family of cars.

In the meantime, the last new 'Morris' had been launched. In 1975, to replace the long-running Austin/Morris 1800/2200 saloons, a new 18-22 series was developed. Although this had the by then conventional BMC transverse engine/front-wheel-drive engineering, it also had a very smart wedge-nosed four-door body style. At first there were Morris, Austin and Wolseley versions of this series, but for 1976 all these separate names were swept away in favour of a manufactured marque called 'Princess'.

By 1983, BL had made it clear that most of their future cars would be called Austins or Rovers, irrespective of where they were to be assembled, and that the Morris name would eventually be applied to light commercial vehicles. Accordingly, it seems clear that the Morris Ital will be the last BL passenger car to carry the famous 'Morris' name. Commentators at sporting events often say it is a pity there had to be a winner. Such a case is the Austin/Morris battle which characterised a large part of the British motor industry for decades, and caused much bitterness. Much credit is due to the current BL management for resolving this and other historical problems in a way that seems best for the future of the industry.

## Riley (1898 to 1969)

**Built: Longbridge and Coventry, Warwicks, Abingdon and Cowley, Oxon**

One of the company's most famous advertising slogans tells it all for Riley: 'As Old as the Industry . . .'. This company built its very first car before the end of 19th Century, and was then a prominent marque for the next 70 years. Originally the Riley family had operated a weaving business in Coventry, then build pedal cycles, motor cycles, and eventually cars — a familiar progression for Coventry-based companies at the turn of the century. The family, too, not only kept control, but designed, built and managed the company until 1938, when financial problems led to Lord Nuffield making one of his celebrated personal purchases.

There were 'forecars' (in which the passenger sat ahead of the driver, in a wicker basket), and 'tricars' (really large motorised tricycles) in Riley's early history, but before the First World War there were also V-twin engined machines like the 12/18hp model of 1907, and the 17/30hp sleeve-valve four-cylinder engined machine of 1913.

From 1919, however, Riley not only introduced a new 10·8hp side-valve engined chassis, but also the now legendary blue diamond radiator badge, and in the next few years the company re-established its sporting reputation with two-seaters like the Redwinger.

The big breakthrough, and one which made the company's products more notable in the rest of the Twenties and throughout the

**Post-war 1½-litre RM series Riley in modern classic saloon race. Similar 2½-litre models were raced originally but main appeal was as fast, handsome and comfortable touring car**

Thirties, came when the first of the distinctive twin high-camshaft (but *not* overhead camshaft) engines was produced — this was the Nine of 1926, whose 1087cc 32bhp unit was remarkably efficient for the period.

In the next few years the company, which not only built its own engines, but also made its own coachwork and many other components normally 'bought out', expanded its range, and also built up a remarkably successful racing and rallying programme. Before the end of the Twenties not only were there famous limited-production sports cars like the very low 'Brooklands' Nine, but also the first twin high-cam Riley 'six' of 1633cc.

During the Thirties, Riley produced such a wide range of cars — different bodies, different specifications, different names, and many cross-fertilised options — that it was no wonder they found it difficult to make money, for rationalisation was *not* the name of the game at Riley! There were Riley Nines, but 9hp engines were also found in Monaco, Biarritz, Gamecock, Falcon, Lynx, Kestrel, or Merlin models. Some had two-seater sports car shells, some were two-door coupés, and some four-door saloons, the most graceful having sweeping tails and those characteristic lozenge-shaped side windows.

In due course, six-cylinder engines of various sizes took over and achieved real fame when much-modified for use in the ERA racing car of 1934-1939. Once again there were several model names, including the Deauvilles, Alpines, Mentones, Adelphi and (just to confuse things even further, six-cylinder models also called Kestrel, Lynx and Falcon.

Later in the Thirties, Riley also produced a couple of V8 engines, one for the Autovia and one for the 8-90, plus a couple of new, larger, four-cylinder engines, of 1·5 and 2·5-litres. One of the nicest of all was the Sprite two-seater, which evolved from the limited-production MPH model.

**Fred Rolph conducts his ex-Raymond Mays White Riley over the Brooklands Test Hill. Fore-runner of ERA GP car**

**Riley 1.5 was popular BMC confection based on Morris Minor with twin carb B-series engine, and luxury trim**

Bankruptcy in 1938 was followed by Lord Nuffield's rescue, and an almost immediate resale to the Nuffield Group, but there was little time for anything new from Riley before the outbreak of war in 1939. Immediately after the war, however, two new cars were introduced, on the same basic chassis with independent front suspension, using the 1·5-litre or 2·5-litre four-cylinder engines, and with sleek and flowing four-door saloon styling; Roadster versions of this car were also produced, mainly for export. For some years, therefore, Riley maintained much individual character, though assembly was moved down from Coventry to the MG factory at Abingdon in 1949.

From the early Fifties, however, rapid rationalisation set in. The first 'BMC' Riley was the 2·5-litre Pathfinder of 1953, which retained the twin-high-camshaft engine, but this car became the 2·6 model in 1957, when given a C-Series engine — the design of the car, in any case, being basically the same as that of the Wolseley 6/90. In the meantime, the Morris Minor-based Wolseley 1500 had also been introduced, and the 1·5 was merely a tuned up version of this 1·5-litre (B-Series engine) car.

From 1959, Riley and Wolseley shared the same basic destiny, with specially trimmed and badged versions of mass-production BMC units carrying the familiar blue diamond Riley badge. The 4/68 was the same basic car as the Wolseley 15/60 and MG Magnette Mk III, while the Elf was a small Mini-based front-wheel-drive car almost identical in all mechanical respects as the Wolseley Hornet, both these cars being built at Cowley.

Then, during the Sixties, came the Riley Kestrel, which revived a famous name even if there was no trace of that Thirties car's heritage. The Kestrel was a slightly more powerful version of the Austin/Morris 1100, mechanically the same as the MG1100, which is to say that it had a transversely-mounted engine and front-wheel-drive, plus — of course — the Riley badge and radiator grille.

Riley, however, was one of the first marques to be killed off after British Leyland had been formed, both Elf and Kestrel being discontinued in 1969. The last individual 'Riley' component, however, had been the engine of the Pathfinder, dropped in 1957.

## Rover (1904 to date)

**Built: Birmingham, Coventry and Solihull, Warwicks, and Cowley, Oxon**

Rover, like Triumph and several other British car-makers, started out by building pedal cycles, then motorcycles, and did not produce their first car, a single-cylinder backbone-framed machine, until 1904. Like other car-makers, too, Rover expanded slowly before the First World War, winning the Tourist Trophy race in 1907, and allowing themselves a couple of technical diversions into building cars with sleeve-valve engines, along the way.

In the Twenties, the Vintage years, Rover began to expand mightily, buying a new factory in Birmingham and introducing a cheap and attractive air-cooled flat-twin 8hp model. They also introduced 14/45 and 16/50 models with complex overhead-camshaft engines, but by the end of the decade, as the British economic depression deepened, they found themselves in serious financial difficulties.

Fortunately, the directors had hired Spencer Wilks (from Hillman) as their general manager in 1929, and it was under his cautious leadership that the company was gradually returned to profitability. His policy, interestingly enough, was to build fewer cars than the old company had attempted to do, but to make sure that their quality was high, and their prices high enough to generate profits. It was Spencer Wilks, and his engineer brother Maurice, who evolved a whole new range of cars, first seen in 1933, which gradually but safely transformed the company's image. By the end of the Thirties, Rover was once again building more than 10,000 cars a year in Coventry, and had a fine reputation. There were saloon cars, coupés and tourers, with engines ranging from four-cylinder, 1·4-litre, all the way up to six-cylinders and 2·5-litres.

Such was the company's new standing in the business community that Rover was invited to become involved in the first Air Ministry 'shadow' factory scheme, and to manage aero engine factories, the first at Acocks Green, the second (much larger, and with a great deal of land all around it) at Solihull, both being on the outskirts of Birmingham.

During the Second World War Rover not only ran these two factories but became closely involved with Frank Whittle and Power Jets Ltd in the development of Britain's first gas-turbine aero engines, though in 1943, with government approval, they 'swopped' these turbine interests with Rolls-Royce for the right to build Meteor tank engines instead. It was during the infamous blitz bombing of Coventry that Rover's car production lines were severely damaged, such that it was not thought feasible to start building cars again in Coventry after the war.

The shadow factory at Solihull was rapidly converted, and Rover car assembly started up there in 1946. But the latest range of private cars — originally of pre-war type, but soon to be the updated P3 models, which had traditional sty-

**Rover's post-war history centred around quality engineering and the solid middle-class buyer: doctors, bank managers, solicitors could all be seen driving Rover P4 'Aunties' (left) and 3 and 3½ litre 'Great Aunt's'**

ling but independent front suspension and the new type of sloping-head engines — could not possibly fill the vast space, so the Wilks brothers looked around for a stop-gap.

That 'gap-filler', launched in 1948, become one of Rover's greatest successes, and money-spinners — the Land-Rover. Originally inspired by the US military Jeep, it soon took on a character all of its own, and the sturdy four-wheel-drive chassis was eventually made available in a variety of wheelbases, with petrol and diesel engines, and with an amazing diversity of body styles and options. Eventually it was looked on almost as a separate marque. (See April, 1983, *T&CC* and separate Land-Rover, Range Rover section in this supplement.)

Rover's first all-new post-war range of cars was the P4 model, announced in 1949, and continuously built until 1964. P4 had a modified version of the P3 chassis, but a conservative and full-width body style. At first it was a '75', pure and simple, with a 2·1-litre six-cylinder engine, but over the years there were also 60, 80, 90, 95, 100, 105 and 110 versions, with four-cylinder and six-cylinder engines (the largest being of 2·6-litres), overdrive and automatic transmission, but all with the same four-door styling; not for nothing was this car affectionately known as 'Auntie' because of its staid manners.

But Rover was not always staid, as the intriguing series of gas-turbine projects, masterminded by Spen King, made clear. Although no such car ever went into production, there were mid-engined (T1), front-engined (T2), rear-engined (T2A), rear-engined and four-wheel-drive (T3) and finally front-engined (T4) prototypes, the last being built in 1961. If nothing else, this project convinced the world that Rover had fine engineers, and convinced Rover that the gas turbine engine was too costly, and too thirsty to be viable for cars. There was also, of course, the Rover-BRM racing sports car project, which appeared twice in the Le Mans 24 Hour race (finishing tenth in 1965), whose chassis was a widened GP BRM design, but this was purely a publicity vehicle.

In the meantime, Rover had designed a much larger car to join P4 at Solihull, the P5 3-litre model. This used an enlarged version of the familiar six-cylinder P4 unit, but was altogether more smart, and more roomy. P5 eventually outlived P4 by nine years, for in 1967 it received an engine transplant, being the first Rover to be fitted with the ex-Buick light-alloy V8 3·5-litre unit. There were four-door saloons and four-door 'Coupés' with a lowered roof line, and the range continued until 1973.

By the end of the Fifties, Solihull was a three-product factory — P4, P5 and Land Rover, and the company was set on expansion. It was decided to produce an ultra-modern medium sized car to take over from P4, a car smaller, lighter, but with much more sporting handling and performance. Massive new buildings were required at Solihull to make this new car, for the old factory could easily have been given over to Land-Rover production, if required, so a new 'North Block' was built for the manufacture of a new P6 model, which was announced in 1963.

This was the famous Rover 2000 range of cars which, when introduced, was entirely new — new base-unit body/chassis structure, new four-cylinder overhead camshaft engine, new transmission, and new suspension. It was in direct (if not bitter) competition with the Triumph 2000, and these two cars instantly created a new '2-litre Executive' class of car. It was a success right from the start, and before the last car of all was built in 1976, more than 327,000 had been assembled.

P6 soon developed into a complete range though, like P4 and P5 before it, there was only ever one basic four-door saloon car style, in this case with removable body skin panels. The original car was joined by the more powerful 2000TC in 1966, but much more exciting changes were made in 1968, when the light-alloy V8 engine, with automatic transmission, was somehow shoehorned into the P6 structure, to give birth to P6B, known to the public as the Rover 3500. This car was no heavier than the four-cylinder model, but had 50 per cent more power, and was a 120mph saloon which appealed to many buyers.


**The light-alloy V8 engine was fitted into the P6 shell which had previously housed only the 2000cc and 2200cc engine to give the 120mph 3500 which found a ready executive market**

In the meantime Rover had taken control of Alvis in 1965 and the production of an advanced mid-engined 2+2 coupé with the V8 engine was contemplated. This car would have performed nearly as well as the Jaguar E-Type and would have cost considerably less to build. Assembly eventually might have been at the Alvis, Coventry, works, if the project, known as P6BS at first, P9 when re-styled, had not been scotched. This change of plan came because Rover was absorbed by Leyland in the winter of 1966-67, and became a part of British Leyland in 1968, at which point Jaguar stopped being a rival, and became a colleague.

British Leyland's plan for Rover was to produce a big P8 model, a real flagship to line up with the Jaguar XJ6, but this was cancelled, and in 1972 it was decided to merge Rover with Triumph. The immediate result was that a new large saloon car, coded SD1, was designed and eventually launched as a beautiful five-door hatchback, known as the new Rover 3500, in the summer of 1976. To build the car, yet another large new factory block was erected at Solihull, so that from this point there were three separate facilities on the same site.

By 1978, the 3500 had been joined by the 2300 and 2600 derivatives, which used Triumph-designed overhead-cam engines. Solihull, however, was not working to full capacity, for the interim P6 'North Block' had been emptied, and demand for the latest big Rover was not as high as had been hoped. At this stage it was decided to fill up the new 'SD1' assembly hall with other models, one of which might have been the Triumph 'SD2' hatchback (see Triumph section), or the old Dolomite models before that was ready. In the event, assembly of Triumph TR7s, which had been moved from Speke to Coventry in 1978, went to Solihull in 1980, along with the new Rover V8 engined TR8 version of that sports car.

It was, however, a time of financial and commercial upheaval inside BL and by this time the plan was to retrench somewhat and to concentrate the assembly of cars on just two plants — the 'Austin' factory at Longbridge, and the 'Morris' plant at Cowley. As a consequence, the volume production side of the business was retitled Austin Rover, and it was inferred that future models would carry mainly Austin or Rover badges.

The big modern SD1 plant, therefore, which had only been opened in 1975-1976, was closed down at the end of 1981, and assembly of a modified series of big five-door Rovers was transferred to Cowley. The Solihull factory, therefore, currently builds only four-wheel-drive vehicles.

## Land-Rover and Range Rover

Land-Rover, the four-wheel-drive 'stop-gap', soon came to dominate the scene at Solihull, for within two years it was easily outselling the new P4 Rover saloons. More than this, like Hoover and Biro it became the generic name for *any* product of its type, and was eventually sold in nearly every country in the world.

**A stately P4 left, universally christened 'Auntie' and alongside, its later relative P5 which latterly was powered by the V8 unit**

The first Land Rovers had an 80in wheelbase, but the 107in long-wheelbase model was offered in 1954, and the definitive choice of 88in or 109in wheelbase options was available from 1956. The Mk II version, in 1958, not only had a larger (2·25-litre) petrol engine but slightly more stylish lines.

The quarter-millionth machine was built in 1959, and in the Sixties annual production began to exceed the 40,000-a-year mark. Technically, however, there was little major change, though a six-cylinder (Rover P4) engine option was made available in 1967. The half-million production mark was reached in 1966, but it was not until 1971 that the MkIII Land-Rover, complete with all-synchromesh gearbox and a more stylish facia and interior, took over.

Throughout the Seventies the main technical interest lay in the special machines produced and developed for military forces all over the world. The '½-ton' was really a standard Land-Rover under the skin, but the 101in wheelbase machine of 1975 was a special chassis linked to the V8-power of the Range Rover. It was not until 1979 that a conventional V8 Land-Rover was made available.

In 1983 the first really new Land Rover chassis for 35 years, the 110 model, went on sale. In many ways the layout of this frame was related to that of another successful four-wheel-drive machine, the Range Rover, which had been launched, in three-door estate car, 3·5-litre V8 engine guise in 1970. The Range Rover was a luxuriously equipped machine, considerably more up-market than the utilitarian Land-Rover, with production limited to no more than 10,000 a year in the mid-Seventies, but by the early Eighties its options included five-door coachwork, automatic transmission, overdrive, and (like the Land-Rover) many special bodies built by outside concerns.

The Solihull four-wheel-drive machines appeared to be immune to British Leyland's financial crises, and never lost their markets. With and millionth Land-Rover built in 1976 (more than 1·3 million by the time 110 was launched in 1983), and more than 100,000 Range Rovers on the road by this time, the successful trio of machines — MkIII, 110 and Range Rover — looked well set to keep Solihull busy throughout the Eighties and beyond.

**Below, 1907 Standard 30HP Roi-des-Belges which had a six-cylinder engine of 5297cc**

## Standard (1903-1963)

**Built: Coventry, Warwicks**

RW 'Dick' Maudslay was a civil engineer who, captivated by the few motor cars he saw in London at the turn of the century, came to Coventry in 1902 to set up the Standard Motor Co Ltd. The story goes that he wanted all parts of his new car to reach a reliable standard, and that that was how the company named was coined.

The first cars were fitted with under-floor single-cylinder or twin-cylinder engines but by 1905 the first six-cylinder Standard, the 18/20hp model, was put on sale. In 1906 the first 30hp model was announced, a six-cylinder machine like so many of Standard's early cars, and the familiar shouldered radiator style, allied to a Union Jack radiator bridge, was fitted to all cars built from 1908. Like most pioneering British car makers, Standard concentrated on large-engined machines at first, but the 9·5hp 'S' model light car made its bow in 1913, at almost the same time as the launch of the new Morris Oxford. Before production was suspended after the outbreak of world war one, more than 50 'S' models were being built every week.

During the war, Standard established a new aircraft-assembly factory on open ground at Canley, on the outskirts of Coventry, and from 1919 motor car assembly was progressively moved there from the city centre premises. A range of cars, from a tiny 8hp machine to the very successful 13·9hp SLO4 variety, helped push production up to about 10,000 cars a year by 1924, but the company then stagnated somewhat until the important new 1·1-litre 'Nine' was launched before the end of 1927.

The most important event at Standard at that time, however, was the appointment of Capt John Black as director and general manager in 1930, for it was under his leadership that Standard blossomed to produce over 50,000 cars a year by the end of the 1930s, and became a member of Britain's 'Big Six' manufacturers. In 1934, Black became sole managing director of Standard.

**Above, Standard 9.5HP of 1913, launched at about the same time as the Morris Oxford. Before production was suspended due to the outbreak of the First World War, more than 50 of these were being built every week. After the war, production moved from Coventry to Canley**

A whole new series of models was prepared, using a complex family of side-valve, four and six cylinder engines, ranging from the original Nine to a 20hp Six. The engineering of the larger cars was such that William Lyons had no hesitation in using it as a basis for his first SS1 cars introduced in 1931.

John Black's proudest achievement in the late Thirties, however, was to produce a complete new range of Flying Standards, all with the same type of fastback body styles. Two types of engine, small four-cylinder units for the 8s and 10s and larger fours or sixes of the same family for other models, were all that was needed, and by the end of the decade independent front suspension had begun to appear on some cars, and would undoubtedly have been standardised if the second world war had not broken out. There had even been time for a costly and unsuccessful diversion into the building of a 2·7-litre 80bhp V8 along the way.

Standard, like other Coventry car makers, achieved miracles in the production of military vehicles between 1939 and 1945, and along the way Sir John (knighted for his war work) found time to buy the rump of the Triumph car company as a prestige marque for post-war use. Triumphs, indeed, were the first new models to be announced after the war, for Standard itself was too busy setting up the Ferguson tractor assembly business on behalf of Harry Ferguson.

Their own all-new car was the Standard Vanguard, which came close to satisfying the government's request for car makers to embrace a 'one-model' policy in post-war 'austerity' Britain, for the engine was also used in the Ferguson tractor, and the complete rolling chassis, in lengthened form, under the razor-edged body of the Triumph Renown saloon. The Vanguard was simple, rugged, and reliable, and sold well in Britain and the many Commonwealth countries, though with its steering column gearchange and soft suspension it could never be described as a sporting car.

**Above, Standard Big Nine with 1.1 litre engine launched before the end of 1927**

For the next few years there were new Triumph as well as Standard models from Canley, notably the chunky Mayflower saloon, but in 1953 the first true post-war small Standard arrived — the Standard 8. This was one of those rare cars which was new from end to end — not only a compact little four-door bodyshell (no separate chassis), but a brand new 803cc overhead valve engine, and four-speed transmission to suit it. It was this car, and the 10hp and restyled Pennant models which evolved from it, which helped bring so much prosperity to the company in the Fifties.

The Vanguard in the meantime had been updated as the Phase II in 1953, while an all-new unit construction four-door body/chassis shell was produced for the Phase III model in 1955. Somehow, though,

the Vanguard seemed to have lost some of its appeal, and at Canley it was the Triumph name, so successfully flaunted by the TR3 sports cars, which took most of the headlines.

Accordingly, when the time came to replace the Standard 8/10hp saloons in 1959, it was decided to call the new cars Triumph Heralds, and the Standard Vanguard was the only remaining car to carry the company's famous name. It was, of course, a successful design, not only because it was built in an estate car derivative, but because there was a higher-performance derivative known as the Vanguard Sportsman, along with light commercial vans and pick-ups as well. Standard was also building small saloons, of course, and dabbled with the idea of building tractors when they pulled out of the Ferguson agreement in 1959, but nothing came of this.

Much work went into keeping the Vanguard competitive, in one direction as the smaller-engined, more simple, Ensign, and in another by hiring the Italian stylist, Michelotti, to smarten up the car (it thus became the Vignale Vanguard), but the most ambitious change came in 1960, when the straight-six engine, evolved from the small 'four' used in Heralds, was fitted. This was a smooth 1998cc unit, and the Vanguard then became the Luxury Six.

Soon after this, however, Standard-Triumph fell into financial problems, and the company was taken over by Leyland Motors. After an interval to survey the present and future model range, Leyland confirmed that the 'Triumph' name would appear on all new cars from Canley, and the last Standard of all was the Ensign de Luxe made in May, 1963. Soon after that, the 'new Vanguard', actually called the Triumph 2000, was released, and the 'Standard' marque was dead.

## Star (1898-1932)

**Built: Wolverhampton, Staffs**

STAR was one of the pioneering British marques, for they began selling cars before the end of the 19th Century. Before the first world war, Star was among the top six British manufacturers, with rather expensive models, but in the Vintage era their cars gradually were seen as too costly and too specialised. Even though Star was taken over by Guy Motors in 1928, the marque was to have only a limited life thereafter. Theoretically, therefore, Star became a Jaguar-owned company in 1961!

## Stellite (1913-1919)

**Built: Birmingham, Warwicks**

THIS was a short-lived economy model built by a subsidiary of Wolseley before and after the first world war, but it was then superseded by a down-market Wolseley, and never revived.

## Thornycroft (1903 to 1913)

**Built: Basingstoke, Hampshire**

THORNYCROFT were already known for building steam-engined lorries before they started selling cars. The originals were a 10hp twin and a 20hp 'four', both with shaft drive. Before 1910 the cars had grown and grown, having modern features like overhead valve engines, but commercial vehicle activity was always more intense, and the last Thornycroft car of all was made in 1913.

## Triumph (1923 to date)

**Built: Coventry and Solihull, Warwicks, Liverpool, Merseyside, and Cowley, Oxon**

SIEGFRIED Bettman's Triumph company started building bicycles in Coventry in 1887, motorcycles in 1902, and by the end of the first world war the name had become world-famous. However, it was not until the company had expanded, by buying up the redundant Dawson car factory, that they had sufficient space to produce cars. The first four-wheeler Triumph, the 10/20, was announced in 1923.

Until the early Thirties, Triumphs were typical limited-production Vintage, and then 'depression', models with mainly conventional engineering features and conservative styling, though they did begin building sports tourers at the end of the Twenties, had a fine small car in the Super Seven, and they pioneered the use of hydraulic brakes among established British car makers. Until the early Thirties the manufacture of motor cycles was always commercially more important, however.

Major changes which were to lead indirectly to the company's continuing financial difficulties in the late Thirties, began in 1932, when the first of the cars to use a licence-built Coventry-Climax engine, the Super Nine, was revealed. This was followed by the design of a smart new middle-class range of models called Glorias, and Vitesses, and it was to develop these further that Donald Healey was hired in 1933.

For the rest of the decade, every Triumph production car was based on the same chassis design, though the styling of the coach-built bodies — saloon, coupé, tourer or sports — was altered regularly, and the original range of four-cylinder and six-cylinder engines was replaced by a new all-Triumph range of engines from the end of 1936.

Donald Healey, egged on by his enthusiastic managing director, Claude Holbrook, also produced the extraordinary supercharged eight-cylinder Dolomite of 1934, whose engine was a line-by-line copy of the successful 8C Alfa Romeo unit, but only three prototypes were ever built, and the car never went into production. The name, however, did not die, for the Dolomite badge was applied to the waterfall-nose Triumph-engined saloons which saw the factory through from 1936 to 1939.

The company lapsed into financial liquidation in 1939, and was bought by Thos W Ward of Sheffield, but they sold the bombed-out assets to Sir John Black's Standard Motor Co in 1944. Thereafter, all new Triumphs were more properly 'Standard-Triumphs'. The first of these, launched by Standard in 1946 (and built in the Standard factories, for the original Triumph plants had been sold or blitzed) were the Roadster and the 1800 saloon, both with tubular chassis, and with Standard 14hp engine, transmission and independent front


**Above, the Triumph Dolomite, one of the company's mainstays from 1936 to 1939. It is a descendant of the 1934 straight-eight Dolomite**

suspension; the Roadster had individual styling incorporating the last British 'dickey-seat' installation, while the saloon had a Mulliners body with razor-edge lines.

These cars were eventually up-engined (with Standard Vanguard components), and the saloon even had a long-wheelbase version of the Vanguard's chassis too, but the next new Triumph was the stubby, razor-edge, Mayflower of 1949, also with independent suspension, a unit-construction shell, and an old Standard 10hp engine. It was not until 1953 that there was a true sporting Triumph on sale again.

Standard had shown the bulbous TRX roadster prototype in 1950, though nothing became of it, and the first 20TS prototype of 1952 seemed set to disappear too. As is now well known, a crash redevelopment programme and somere-styling led to the car being called the TR2, a good value 100mph sports car, and one which underpinned

**Below, more than 80,000 TR3/3As were sold, most of them in the USA and Canada. The car was very successful in competition, notably the Coupé des Alpes and the Alpine Rally where Keith Balliat succeeded in beating all the Austin-Healey's in 1958. Shown is a late-model TR3A**

**TRs through the ages, including top left, the bulbous TRX prototype which never reached production. The TR5, bottom left, was fitted with a twin-cam engine and ran at Le Mans. Top right TR2, bottom right, TR6 and centre left rugged rallying TR4**

Triumph fortunes for the next ten years at least. TR2 became TR3, then TR3A, and more than 80,000 were sold.

The Mayflower had been dropped in 1953, and the next saloon Triumph was the Herald of 1959, a separate-chassis car which replaced the Standard 8/10/Pennant models, with Michelotti styling, all-independent suspension, and a variety of body styles, including coupé, convertible, and estate car. This launch coincided with the Standard-Triumph company's decision eventually to drop the name 'Standard' from their line-up, and call all new cars Triumphs, which had built up a fine sporting reputation, especially overseas.

Standard-Triumph, however, fell into major financial difficulties at the end of 1960, and was eventually taken over by Leyland Motors, who moved a new management team into Canley. This team, which included Donald Stokes as sales director at first, approved the introduction of the TR4 (with a completely new body style), the Spitfire (which was really a tuned-up, short-chassis, rebodied Herald), and a new large-medium saloon which they called Triumph 2000. The last Standard was built in 1963, and the Coventry company, now only making Triumph cars, returned to satisfying profitability.

In 1965, Triumph introduced their most technically-advanced model yet, the front-wheel-drive 1300 saloon. This, though successful, and very well equipped, was neither as profitable nor as reliable as first hoped, and was gradually superseded by conventional rear-drive successors (using the same basic body shell), called Toledo and 1500TC. The last of the British-designed front-drive Triumphs, a 1500, was built in the autumn of 1973.

By the late Sixties, Triumph not only had a formidable range of cars, which included the fuel-injected TR5 (and a similar-engined saloon on the way) but also the six-cylinder Vitesse and GT6 models, and the company had been joined with that of Rover. In 1968, too, the vastly expanded Leyland group joined up with BMH, to form the British Leyland combine.

By the early Seventies, the Triumph range included the Stag 2+2 seater, with its unique single-cam vee-8 engine, the shapely Mk II 2000s and 2·5PIs, and the latest in the line of Spitfires and TRs, while there was also an intention to develop a range of fast sports saloons on the basis of the rationalised rear-drive 1500TC 'chassis' and body shell. First, in 1972, there was the Dolomite, with its new single cam engine (which was also being supplied to Saab in Sweden, for the 99), and a year later the Dolomite Sprint was announced, in which the 2-litre engine featured a 16-valve head with ingenious valve gear operation from only a single camshaft in that head.

By 1975, British Leyland rationalisation had progressed so far that modified Morris Marina gearboxes were in the latest Spitfire sports car, whose engine and transmission was also being used in the MG Midget. However, since the early Seventies, Triumph had also been working on the design of a new breed of sports car to replace the last of the 'classic' separate-chassis TR6 models. A new factory had been built in Speke, Liverpool where Toledo saloons were built at first, but from 1975 this plant also started assembling the new TR7 sports coupé.

As things transpired, because of the difficult British Leyland financial position, the TR7 was the last major new model to be introduced carrying Triumph badges, and even that model was ill-starred, and did not evolve in the way its designers had intended. The original scheme of things envisaged 8-valve and 16-valve four-cylinder engine options, and a (Rover) 3·5-litre V8 version, not forgetting a convertible, and eventually a long-wheelbase fastback derivative to replace the complex Stag. A long and bitter strike at the Speke factory led to it being closed down, and TR7 production first being transferred to Canley, and finally to the Rover Solihull factory. Neither the 16-valve 'Sprint' nor the long-wheelbase versions were ever introduced, and the V8-engined TR8 never went on sale in Britain.

By the late Seventies, Triumph had effectively been merged with Rover, which explains why there was no successor to the 2000/2500/2·5PI saloons, and why the Rover 2300/2600 models have a Triumph-designed engine and gearbox — the box also finding its way into cars as diverse as the 110 series Land-Rover and the 4·2-litre Jaguar XJ6 models.

Rationalisation, and a reduction in the range of models offered, meant that all existing 'Coventry-Triumphs' gradually disappeared, and were not replaced. The last of the big saloons was built in 1977, the last Spitfire in 1980, the last Dolomite in 1980, and the last TR7 in 1981. The Canley factory was then extensively re-modelled, and a major part of it now houses the design, styling, and development functions of the Austin-Rover Group.

The Triumph marque, however, was not allowed to disappear altogether. Before the end of 1979 it became known that BL were coming to a co-operative arrangement with Honda of Japan, though for a time it seemed that the new saloon would be badged as an MG, and would be built at Abingdon. From the autumn of 1981, however, the new car, which was mechanically identical with the four-door Honda Ballade front-wheel-drive saloon, was put into production at Cowley, with a 1·3-litre transverse engine, and was actually badged as the Triumph Acclaim.

## Trojan (1922 to 1936)

**Built: Kingston-on-Thames, and Croydon, Surrey**

LEYLAND, having dabbled with an eight-cylinder car in Rolls-Royce class, swung to the other extreme by producing the Trojan in 1922, a car of the utmost simplicity. The first, famous, Trojans, had a two-stroke under-floor four-cylinder engine and splendid low-speed pulling power. Early cars had solid tyres, which were still available in 1929. For a time the Trojan was the cheapest, slowest and (arguably) the ugliest British four-seater on the market.

A new model, the Type RE (for rear-engined) came along for the 1930s, with anachronisms like chain drive, and no front brakes. The styling, at least, was conventional, but demand was strictly limited. The last of all, dearly loved by a few fanatical followers, was built in 1936.

## Wolseley (1896 to 1975)

**Built: Longbridge and Birmingham, Warwicks, and Cowley, Oxon**

LIKE Daimler and Riley, Wolseley was one of the very first British motor cars ever to go on sale. The first generation of Wolseley cars were designed by the firm's general manager, Herbert Austin, whose career had begun with the Wolseley Sheep Shearing Machine Co in Australia. They had horizontally positioned engines, under the front floor. By 1903, Wolseley was building 800 cars a year, which made them the best-selling British marque, a lead which they retained until the outbreak of the first world war, at which point they were building 3000 cars a year.

Success came quickly to Wolseley, for Austin himself drove a prototype successfully in the Thousand Miles Trial of 1900. But

after single, twin, and four-cylinder 'horizontal' Wolseleys had been built, Austin quarrelled with his co-directors and left — to found his own Austin company in a factory at Longbridge a few miles away. Wolseley, which had already been building vertical-engined cars for J D Siddeley, then reverted to more conventional machines. There were Wolseley-Siddeleys until 1911 (Siddeley then joined forces with Deasy in Coventry), but after that the cars, now with larger side-valve engines, and shaft (instead of chain) drive, were plain Wolseleys again.

The Wolseley marque, incidentally, had been owned by the vast Vickers combine since 1901, whose interests included armaments manufacture, so it was reasonable that Wolseley should be given the job of building Hispano-Suiza overhead-cam aero engines during the first world war; for many years thereafter, Wolseley motor car engines exhibited traces of the technically advanced Hispano valve-gear layout.

After the war, with big factories at Adderley Park and Ward End, both close to the centre of Birmingham, Wolseley expanded quickly, and produced new overhead-cam 10hp and 15hp four-cylinder, and 20hp six-cylinder models, with a 24-30hp model added in 1923. The 10hp car was a 1·3-litre model, replacing the Stellite, and had a gearbox combined with the rear axle — a very advanced feature for the early Twenties.

St John C Nixon, who wrote Wolseley's official company history in 1949, suggests that it was Morris's price-cutting tactics, which transformed the Cowley magnate's fortunes, which caused Wolseley sales to fall in the mid-Twenties, and the company to go bankrupt in 1926. Perhaps it was only justice, therefore, which led Morris himself to purchase Wolseley after a brisk court-room bidding battle with Herbert Austin.

For the next eight years, therefore, Wolseley was owned personally by William Morris (later Lord Nuffield). New overhead-cam engines being designed at Wolseley were found ideal for Morris and MG cars, and under the guidance of a young production engineer called Leonard Lord (later to become famous at Morris, Austin *and* BMC!) the factory's facilities were transformed.

By the end of the Twenties, the Wolseley mainstay was a series of straight four, six and eight cylinder engines, most with a 'benchmark' stroke of 101mm all with overhead camshaft (some would say 'Hispano') valve-gear. Yet at this stage, surprisingly enough, there was little rationalisation of chassis or bodies with Morris cars. At the beginning of the Thirties, however, Wolseleys started to receive names — Hornet and Viper for instance, and commonisation of parts increased. The first Hornets, for instance, were really no more than long-wheelbase Morris Minors with a six-cylinder version of that car's tiny 'four' squeezed in up front. The Hornet Special was sold only as a rolling chassis, for coachbuilders to add their own special sports coachwork, and it sold well against six-cylinder sports cars from MG and Singer.

There was a final flourish of new overhead-cam models (Wasp and Sixteen) in 1935, before Lord Nuffield installed Miles Thomas as managing director, and a spate of Morris-based cars began to appear. By 1939, Wolseley sales had soared to 30,000 a year, and if war had not intervened (and frozen out the launch of one new model) they would have been selling 8, 10, 12, 14, 16, 18, 21 and 25hp (RAC Rating) models, all with Morris chassis and body structures, all with overhead valve engines and four-speed gearboxes, and all with the famous illuminated radiator badge and distinctive grille style. It was a triumph for rationalisation, or what we now call 'badge-engineering' though, in truth, the cars were not only better trimmed than the equivalent Morris, but usually more powerful as well.

For the first few years after the second world war, the pre-war models continued to be built, but for 1949 there was yet another change, with new Morris-based models being announced, and production becoming concentrated on the Cowley works, alongside Morris cars. There were two new cars — called 4/50 and 6/80 — both having overhead cam engines (in that respect, at least, they were throw-backs to generation-old Wolseley traditions) in four-cylinder and six-cylinder form, and both were based on the new Morris Oxford/Six unit construction body shell. The 6/80, in particular was a quick saloon, which soon became famous (or notorious, depending on your point of view!) for its role as a police patrol car.

The 4/50 was only built until 1953, and not replaced, while the 6/90 of 1954 was based on the same separate chassis engineering of the new Riley Pathfinder saloon, though with a six-cylinder overhead valve BMC C-Series engine. In the next few years, the Wolseley marque gradually began to lose its previous distinction as BMC wrung every possible sales advantage out of their marques and factories.

It is worth detailing the parentage of new models, to show how heritage was rendered meaningless by modern demands. The 4/44 of 1952 was a medium-sized saloon sharing the same basic body/chassis as that of the MG Magnette Z-Series, but with MG YA type engine and transmission, but when it became the 15/50 in 1956 it was given the Austin-designed B-Series power train instead. The 1500 of 1957 used a Morris Minor floorpan and suspension, along with a B-Series engine and transmission, with a new superstructure, and there was a Riley (1·5) version of that.

Then came the 'Farina' years, the late Fifties and early Sixties, when the 1·5-litre Austin A55 'base car' gave rise to four badge-engineered offshoots, of which the Wolseley 15/60 was one; that car became 1·6-litres and 16/60 for most of the Sixties. To replace the 6/90, the 6/99 came along in 1959, this being a smartened-up version of the C-Series powered Farina-styled Austin A99; it became 6/110, with more power, in 1961.

Then, in the Sixties, there were several transverse-engined front-wheel-drive Wolseleys. The Hornet was a Mini, with better trim, a lengthened tail (with larger boot), and almost identical with a car called the Riley Elf, while the Wolseley 1100/1300 models were based on the Morris 1100/1300s, but with more power and the traditional front grille. Later in the Sixties, the 18/85 was an upmarket version of the Austin/Morris 1800 'Super Landcrab', while the 2200 was no more than a similar derivative of the six-cylinder type of that design, and finally — in 1975 — there came the Wolseley version of the 18-22 design. This car, though the most upmarket and best-trimmed 2227cc six-cylinder derivative of the wedge-shaped saloon, was not even given a separate name or title (when the press enquired, they were told that, if anything, this was a 'Wolseley Wolseley'!), and it was only in production for a few months.

Thus it was that 'Wolseley' became one of the first marques to disappear after British Leyland was effectively nationalised. Even though the marque had never been its own master — having been owned, successively, in 75 years, by Vickers, Lord Nuffield, the Nuffield Group, BMC, BMC and British Leyland — it kept its individuality almost up to the end.

**Above, the little Wolseley Hornet powered by a six-cylinder engine of only 1271cc**

**Below, a Wolseley of the early Twenties. Unlike many manufacturers who dropped their larger cars in the post-war period, Wolseley continued to offer 5 and 7-litre sixes**