

ABOVE: Inside the main Car Assembly Building at Pressed Metal Corporation, Enfield, c1959. On the left are Morris JB vans, then comes the MGA line, and on the right are Austin A55 utilities (pick-ups) which were unique to PMC. The A55s and MGAs are mounted on skuks – temporary chassis on trolleys for moving the vehicles along the line until painted – the Paint Shop is located beyond the toilets on the far right. Final assembly was in the other end of the plant, behind the camera.

## **Building the MGA in Australia**

Australia was an important export market for MG, but with the US dominating post-war exports and incentives from the Australian government to increase local content, BMC Australia's best option to keep the MG brand competitive was for local assembly.

WORDS BY CRAIG WATSON
 PERIOD PHOTOS FROM THE BMC AUSTRALIA ARCHIVES

rior to World War Two,
Australia was the largest
export destination for MG
cars, though overall numbers
were still quite small. For example,
113 TA/TB models came to Australia
between 1937 and 1940. That doesn't
sound like a great deal, but it was 24% of
all exports from a total production run of
3382 – and ten times the number of cars
exported to the US.

With the US becoming the dominant export market after the war, Australia still remained an important destination. While 1820 TCs were shipped to the US, 1774 came to Australia. By the time of the TD, with mass production getting underway and the US taking just over 20,000 in four years, Australia had dropped to fourth behind West Germany and Canada, but retaining a still reasonable number of 904.

Development of the MGA was stalled due to the release of the Austin-Healey in 1952 and MG was ordered to continue with the T-series. The replacement for the TD was therefore the TF, which was released late in 1953. While the US and European markets didn't respond well to the facelift, the TF still sold well in Australia, with 813 coming here in two years, being only second again to the US which took 3731 over the same period.

According to Wheels magazine's new car price guides, in May 1953 an MG TD would set you back £1025, while in October 1955 a TF was down to £982, indicating the slowing sales as the model reached the end of its life. However, by mid-1956 the MGA was available for £1256 - if you could find one! Production had commenced in late 1955, with up to 80% exported to the US in the first year and Australian supply substantially down. Waiting lists for the MGA in Australia stretched to months, and when Modern Motor magazine wanted to get hold of one for a road test in early 1956, BMC Australia was unable to oblige. Instead, the magazine

used a privately-owned example. Bryan Hanrahan declared in the magazine the car was 'as good as it looks' and said: 'Gearbox, steering and suspension combine to make the run sheer delight.'

In the 1920s and 1930s, while most MGs were imported Completely Built Up (CBU), some bare MG chassis were imported, with bodies built locally. This included ten of the 113 TA/TB types and a small number of the S/V/W class cars. After the war, MGs were only brought in CBU by the newly established Nuffield Australia Corporation, but by the 1950s Australian government incentives for local assembly and restrictions on the number of imported cars made the import of cars CBU far less attractive than it had been previously.

Many companies began assembling complete cars, either from Completely Knocked Down (CKD) or Semi Knocked Down (SKD) kits. The majority though were saloon cars, with very few sports cars being locally assembled. The one

exception in any sort of volume was the Triumph TR3 (£1630), which was being assembled by Standard in Melbourne and, according to Sports Car World magazine, barely trickled off the line.

Writing in SCW in August 1957, Pedr Davis bemoaned the difficulty in getting any sports car in Australia - and not only the MGA - saying: 'Today it is almost impossible to buy a new sports car off the peg anywhere in Australia... For example, a Triumph TR3 takes six weeks for delivery and a Berkeley is quoted at something over 10 weeks. The other makes have waiting lists ranging nine months for a Bristol 405 to indefinite for the MGA and Austin-Healey.

'If Rover, Renault and Peugeot can economically use Australian assembly labour, it seems inconceivable that one sports car manufacturer at least could not market sufficient vehicles to keep an Australian assembly plant in swing."

Davis also took direct aim at BMC, saying: 'Look at the giant BMC firm. They assemble a range of vehicles, from the Nuffield tractors to Austin A95 sedans. Could not a quarter of the factory space and a fraction of the import quota be used to build up MGA components? The MGA is one car we honestly believe is a natural for Australian assembly... Could not one manufacturer at least recognise the growing demand... by assembling and marketing a sports car in Australia for less than £1200?

It turns out that BMC was in



harmony with Davis' thoughts, but was actually more than one step ahead. A small batch of eight CKD sets had been dispatched from Nuffield's KD department at Cowley on 27 July 1956. Allowing for two months on the water and delays in getting from the wharf to BMC Australia, they would have been ready for assembly before the end of the year - several months before Davis' article. These would almost certainly have been to try out the body jigs, to test assemblies and practice the techniques, and make sure everything was going to fit and work the way it should before full production began.

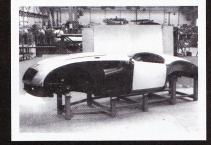
It is here that we need to make an important point, namely that the MGA was not assembled at BMC's main plant at Victoria Park (Zetland), but on a contract basis by Pressed Metal Corporation (PMC) at Enfield, in Sydney's western suburbs. The CKD packs containing chassis and body parts would have been sent directly to PMC at Enfield, while engine, gearbox and possibly some suspension parts were sent to BMC at Victoria Park as CKD. This would explain why engines were not delivered with the initial batch of eight cars, and were subsequently supplied later when production got underway. This is also evidenced by the fact the engines in these eight cars are numbered some 6000 later than would be expected for July 1956, and that the













ABOVE: These photos are from the comprehensive CKD assembly guide sent out from the Knock Down Department at Abingdon and were intended as part of the training for workers on the CKD assembly lines in Australia and elsewhere.

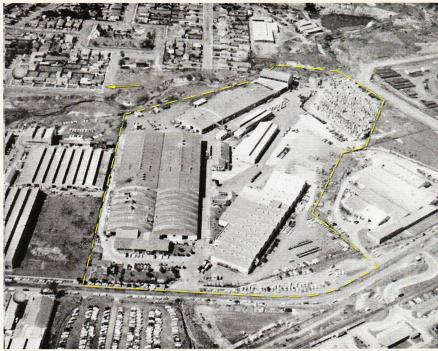
## MGA in Australia



ABOVE: Four MGA chassis and other components packed ready for boxing up and shipping to one of the overseas assemblers. Other packs would contain body panels and mechanical components. Trim, tyres, batteries and more were added in Australia.

« cars were sold with the early production cars in late 1957.

Many people would be forgiven for assuming the MGA was assembled at Victoria Park for two reasons. The first, and most obvious, is that the identifying plates for the cars were supplied from BMC and bore the company's name and Victoria Park address, without any reference to Pressed Metal Corporation. But a more subliminal suggestion that the cars were built at Victoria Park comes from the film From Horses To Horsepower, made by BMC to promote a major expansion of the factory in 1958 from CKD-only to a complete production facility. The opening shot of the film shows a blue MGA. Then, after showing the entire production process in the factory with not an MG to be seen, the MGA is shown leading a procession of the company's products out the gate of the factory. The closing shot shows the MGA at the head of a great line-up of all the cars available from BMC at the time.



ABOVE: An aerial photo of the Enfield factory in 1975, after the factory had been extended slightly to cater for Mini and Moke production after the closure of Zetland (Victoria Park) at the end of 1974. The yellow line shows the boundary of the factory site. The yellow arrow indicates the direction of north.

including some that were CBU imports.

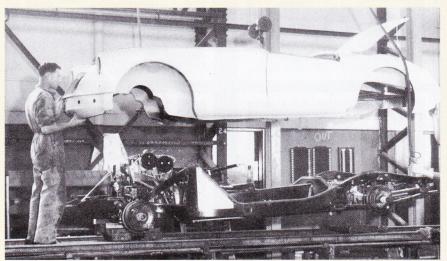
However, despite this first expansion of the Victoria Park factory (which was not completed until the end of 1957). production space was limited and the MGA's assembly had to be out-sourced. At the time, the PMC factory at Cosgrove Road, Enfield, was producing Land Rovers, Morris J2 commercial vans and Austin A40, A50 and A55 utilities designed in-house at PMC – as well as Leyland bus chassis, with the bus bodies and final assembly taking place at PMC's plant in Marigold Street, Milperra.

Only six months after airing his concerns on the sports car industry in Australia, Pedr Davis was congratulating

BMC for taking the initiative, saying: ...we could hardly have guessed that the mighty British Motor Corporation was already on the track, swinging into action with plans to assemble... the MGA in Sydney.' The first production cars had rolled off the PMC line in October 1957 and, according to Davis, were coming off at a rate of three per day. Former production engineer at PMC, Brian Gymer, wrote in 2012 that later production peaked at about six or eight per day - although over the five-year run production averaged only about ten per week. Importantly, it was only the pushrod Roadsters that were assembled locally, in 1500, 1600 and 1600 MkII forms. Twin Cam MGAs and all MGA Coupés, regardless of engine type, were imported CBU.

CKD cars were shipped in crates containing four sets of components, but not all the components for any one car were to be found in one crate. Components were packed together to ensure best-fit to reduce the amount of wasted space. As such, one crate might contain four chassis and four sets of other parts packed around the chassis. The next crate might contain four sets of body panels; the next, suspension parts; and so on. Shipments were therefore based on multiples of four vehicle sets, with eight being common but batches of up to 16 or 24 at a time recorded.

From the beginning, though, not all components came in the packs, with some supplied locally. Initially this



ABOVE: An MGA Roadster body is united with its chassis on the final assembly line in the southern end of the Enfield factory. All Coupés were imported ready-built.

included tyres, batteries and some items of trim, but later included all trim. Some sources also suggest the rear leaf springs were sourced locally. Peter Davis - former Product Engineering Manager and not to be confused with Pedr Davis - says he is not sure about the springs, but they were allocated a local part number. However, this may only have been for use by the Parts & Accessories department.

Although the Australian government's Local Content Plan did not come into being until 1964, there had been much encouragement for local production with the introduction of import quotas and increased tariffs since WW1. Thus, for every component that could be made or sourced locally there was a tax benefit in terms of reduced tariffs. 1489cc B-series engines for the Morris and Austin saloon cars of the day were being machined and assembled from rough-cast components in the Victoria Park factory. The same-size engines for the MGA were supplied from the UK with the block and head machined, but not fully assembled. Also supplied from the UK were the twin SU carburettors. camshafts, conrods and crankshafts.

The engines were assembled in the Unit Factory at BMC's Victoria Park plant and, as with all the B-series engines. were mechanically bedded in for about 20 minutes. Every day, two or three engines were then taken at random not necessarily MG types - and hot-run tested for 40 to 60 minutes. They were then stripped and checked for signs of foreign bodies, such as machining swarf, dirt and improperly fitted parts.

The MGA engines were painted dark red to distinguish them from the similar engines for saloon cars, which



ABOVE: Australia was an important destination for CBU exports immediately after the war, but with government import quotas and tax incentives for local assembly, Nuffield was soon building its own CKD assembly plant at Victoria Park in Zetland. and would farm out assembly of MGs to PMC until 1968.

in this period were painted grey. Prior to painting, the distributor caps were removed along with the plug leads, then masks put over the open distributor and the spark plugs. As the starter motor and generator were already on the engine, they were also painted red.

The gearboxes were not attached to the engines at this time and were left in their raw aluminium state. MGA gearboxes were also assembled at Victoria Park, but all other procedures on the cars, including painting and trimming, took place at Enfield.

After final testing and adjustment, the MGA engines and gearboxes were trucked from the Victoria Park plant to Pressed Metal Corp at Enfield for fitting into the cars. With assembly of the engines and bodies, the fitting of locally sourced parts and the local labour, the MGA 1500 Roadster (not Twin Cam) achieved a local content of around

50%. However, all engines for the 1600, introduced at the end of 1959, and the 1600 MkII (1961) were imported CBU.

As we've seen, the number of locally sourced items increased over time to include all interior trim, batteries. tyres and tubes, and the hood material from about October 1958. To ensure continuity of supply, sometimes more than one supplier would be used. A perfect example is the tyres, which were variously supplied by Olympic (which had its factory next door to BMC's Victoria Park plant) and Goodyear.

Garry Kemm, an MGA enthusiast who has been researching the cars for 30 years, has copies of many BMC warranty cards for MGAs, from which a number of patterns (or just as often a lack of pattern) can be recognised. Interestingly, these cards show that there appears to be no pattern to the fitting of tyre brands and it was probably »







ABOVE LEFT: These CKD packs at Zetland may have contained parts to build Morris Minors, but the MGAs would have been received in much the same way. Engine components would have been assembled at Zetland, while chassis and body panels would have gone straight to Pressed Metal Corporation at Enfield.

MIDDLE: 1st March 1950 and the official opening of the Nuffield Zetland CKD assembly plant. Most of the vehicles on display were still being imported CBU. At that time only Morris Minors were being assembled, but Oxford and Isis would soon be added. A lack of available space meant MGA assembly had to be contracted out. RIGHT: The marshalling area at Zetland where components were stored pending production of the cars.

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« just a case of taking whatever was on hand at the time. For example, chassis number 56991 was originally fitted with Goodyear, while the very next car, chassis 56992 received Olympic tyres.

Although the Australian-assembled cars were mechanically identical and visually very similar to their UK-built cousins, there were many detail differences in numerous areas. While all UK-built MGAs featured leather upholstery, from about March 1958 Australian cars had vinyl - partly to reduce costs and partly for the longevity of the material in the Australian sun. There were also different paint and trim colours available, wire wheels were fitted as standard (UK cars had wires only as an option), heaters were rarely fitted and were a dealer-only option.

On the Twin Cam and the 1600 MkII from the UK the dashboard fascia was covered with Vynide (leather-look vinyl), and on the latter model the scuttle panel was also covered. However, this Vynide fascia covering was not included on the Australian-assembled 1600 MkII.

The 1600 MkII cars assembled locally also came with the ten-row oil cooler as standard, fitted just ahead of the radiator. There were other minor differences, which would take up more space here than they are worth, but one that is of some interest relates to the location of the chassis identification (ID) plate. The ID plates on all models, both UK and locally-built, were screwed to the horizontal shelf behind the engine (in front of where the heater would be, if fitted). According to Anders Dietlev Clausager in Original MGA, the plates could face either side of a UK-built car, but it is believed that they face the left



ABOVE: The final assembly of major mechanical components took place at Zetland, and here we can see (from left to right) rear axles, gearboxes and engines.

(or passenger) side on all Australian cars. The location for the plate is also slightly closer to the left side of the car and the original holes for the plate were welded over and can sometimes still be seen under the paint.

Another small detail that may be of interest was that on the Australian cars where the top of the door hinge pillar was welded to the scuttle, the resulting weld was lead-wiped to smooth it out. This was not done on the UK cars, and it is interesting that the Aussies would go to the trouble.

There were a couple of other places where lead-wiping was used, but this was kept to a minimum, according to Sydney-based MGA restorer Greg Keenan on the US-based mgaguru. com website. 'Reports of Australian built MGAs having copious amounts of lead added are not correct,' Keenan wrote. The other place was where the door met the rear guard. This was done for two reasons, to improve the gap between the door and the guard or bring the guard up to the level of the door.

Also, the cars were lead wiped under the rear corner cockpit rail."

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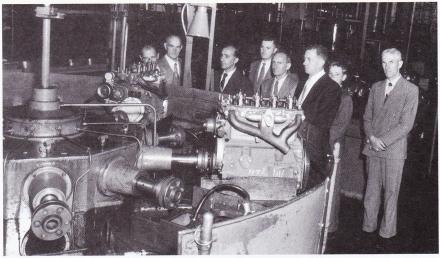
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Pedr Davis reported in Sports Car World that every MGA was road tested after assembly, for up to 20 minutes, along a four-mile route around the Enfield site on public roads, 'which rolls over a wide range of road surfaces. During the run the tester will re-set the ignition to its optimum point and then check the brakes, steering, suspension, engine tune, gearbox, axle and accessory equipment.' It would stand to reason, then, that all Enfield-assembled cars should have come with at least four delivery miles on the clock.

By 1961, sales of the MGA in Australia were slowing considerably and stocks of CKD packs at Enfield were building up. The 1600 MkII was released in the UK in March 1961, with the first CKD packs for Australia shipped on 5th April. With the normal two-month voyage at sea, the cars should have been assembled by July at the latest. However, due to excess stocks of the 1600, the first 1600 MkII was not assembled here until February 1962. Production of the MGA in Australia ceased in July or August 1962, with only 148 of the 1600 MkII made locally. In all, some 2040 MGA roadsters had come through the Enfield plant.

In April 1963, assembly of the MGB began at Enfield. This delay could partly be attributed to running out unsold stock of the MGA, and partly to the normal time required to set up and test production for the new model. The MGB in Australia is a whole other story, and one that we will look at another time.

Our thanks to: Foremost thanks go to Garry Kemm for his help with this story and for checking and rechecking draft after draft as we got the facts sorted out. Thanks also to Peter Davis, Tom Aczel and John Lindsay for their invaluable contributions, and to Rod Anderson for supplying his Australian-built MGA for the photograph on page 65.



ABOVE: B-series engines being bedded in. Every engine, whether imported CBU or assembled locally, was mechanically bedded in on this machine. Every day, sample engines were also hot-run tested to check for build quality or any problems.