

**SCW PROJECT MGB**

# **MORE GO FOR MG 123**

**With the aid of Lynx Engineering in Sydney we give MG 123 a mild head job and go hillclimbing at Mt Cotton.**

**T**HE Australian Hillclimb Championships at Mt Cotton were not ideal for MG 123 to make its competition debut, but as the event was controlled by the Queensland branch of the MG Car Club, we could think of no better place.

Unfortunately, there was no section for series production sports cars and MG 123 came up against some red-hot machinery, such as Anne Thompson's lightweight Lotus Elan and another full-house MGB.

Some modifications were needed. No chance of winning the event unless the opposition blew up but we decided to prepare the car to be competitive at club events while remaining a tractable road vehicle. Costs were also kept within reach of the average MG owner.

We called on Lynx Engineering in Sydney and discussed our ideas with Russell Delforce. After listening for about 10 minutes, Russell said, "I know exactly what you want." Only the head was modified to suit the torque characteristics of the power plant. To save time, a spare head was sent from the BLMC spare parts division.

The inlet ports were bored to 1-5/16ths and then blended, while the outlets were opened 3/16ths. The chambers were then reshaped to get rid of the hot-spot and opened up to allow a greater firing gap around the valves. The area around the spark plugs was also opened up to prevent the shrouding effect the standard head has. Valves and valve springs were left standard.

This operation took a couple of days and we were due to leave for Queensland on the third. The boys at Lynx turned themselves inside out to get the car ready and at 6 am on that day we knocked on the side door of the Parramatta Road factory. Within an hour, the car had been given a run on the dyno, and the standard head taken off. Another hour and the new head was in position, tappets adjusted and all ready for tuning.

The standard needles in the SU carbs were replaced with No. 6s and the oil in the bells replaced with 30 grade. Most people use light oil in the bells but Lynx have had some of their best results from heavy oil. The standard air cleaners were also replaced with special Lynx units. These have a greater area than the normal pancake type and filter better because the velocity of the air through the filter element is lower. The air cleaners are quite unique and exclusive to Lynx.

Tests have shown they have an airflow 56.7 percent better than the pancake type and breathe so well that unless the needles are changed in the carby the engine won't operate above 3000 revs. Besides being extremely efficient, they also look "sexy".

After a run on the dyno, we found that with the new head the standard plugs were cooked. These were replaced with KLG FE 135 Ps. The heat range of these plugs is such they can be used both for everyday motoring and competition work without fouling.

On the dyno, the before-figures showed the car had 68 hp units and a speed in top gear (without load) of 65 mph. Third gear showed 85 hp units and 70 mph.

With the new head and tuning, it picked up to 67 mph and 75 hp units in top and 72 mph with 93 hp units in third and all this for the price of a head (\$60), two Lynx air cleaners (\$5.40 ea), two SU needles (\$1 ea.), and four spark plugs (85 cents ea).

The work was completed by mid-day and we were on the road to Brisbane where BLMC mechanic Richard Towsen was waiting to fit the regulation roll-over bar and act as pit crew for the meeting.

On the road, the difference in the car was amazing. It felt free, revved and accelerated quicker, particularly from 4000 rpm on. The fuel consumption improved as well due to the efficiency of the head. For some inexplicable reason, no matter how hard we tried we had not been able to get better than 23 to 25 mpg in standard form.

This improved with the new head and, even with some press-on Interstate driving, we regularly recorded 28 mpg between fuel stops. A normal MGB should improve fuel consumption on a trip to the high 30s with the Lynx head.

Mt Cotton is about 30 miles south of Brisbane on the road to the Gold Coast. It was started in 1964 by members of the Queensland branch of the MG Car Club bitten by the hillclimb bug. The hill saw its first event in 1968.

From the start, the course takes a right-angled bend and then goes up a one-in-four hill to a left hand loop. The exit from this loop has been a trap for many young players. It drops over a skyline on to the wrong camber and, if a bad

*MG 123 leaves the start at the Mt Cotton hill-climb during the running of the Australian Hill-climb Championships. Our car performed well considering the competition.*



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line is taken, a driver can get into all sorts of bother. The hill then drops down another one-in-four grade, which is taken in third gear with the power on. At the bottom there's an immediate right-hander that leads up a one-in-five hill to another loop at the top which drops down a one-in-three grade to rejoin the first part of the circuit. The cars then sweep up the first down-hill to the first loop and branch off at the top for a very tricky finish. Many a driver has come to grief because he has buttened-off too soon going over the line.

Mt Cotton is not an easy climb and needs to be treated with respect. We were very glad we had taken the time to fit some new Hardie-Ferodo Premium front brake pads. Efficient braking is important on the Circuit and big demands are placed on the linings. Only once did we manage to lock up a front brake and that was caused by overcooking it into the first left hander. At no time did the Premium compounds show any signs of fade.

Hardie-Ferodo designed the Premium pads to fill the gap between standard linings and full competition compounds for road use on high performance cars. Months have been spent on the Hardie-Ferodo testing grounds at Pitt Town and they have certainly come up with the goods. When the Premium pads come on the market they should sell for around \$12 and are well worth the investment for the added safety, especially on highway and Interstate driving.

Naturally we didn't win our event but came away very pleased with the car after a best time of 60.3 sec. We had achieved what we originally set out to do. And that was to give the car that little extra sting without spending too much money and time on expensive modifications. The car is now a very rewarding road car and will be quite competitive at club events.

The climb also helped us to improve the handling by adjusting tyre pressures. After a couple of runs we found we could eliminate the usual MG understeer by putting 32 lb of air in the front tyres and 29 lb in the rear. This gave the car a power on oversteer attitude which, of course, is ideal for getting around the tight corners on the hill. After practice we drove the car from the circuit and found that these pressures worked extremely well on the road as well, until we hit some rough stuff. On the trip home we dropped the pressure slightly to 30 lb front and 27 lb rear and the ride improved.

But some sections of the road were so bad it didn't matter what pressures we ran. We had to slow drastically to avoid bouncing off into the mulga. When the car arrived back in Sydney we took the precaution of going over it with a screwdriver and spanner to tighten up all the nuts and screws shaken loose by 1000 miles of driving on our best highways.

If you've looked closely at the photographs of MG 123 you will notice some new additions this month. One is the front crash bar, supplied by Andrew Rennie of Melbourne. This is designed to protect the grille, which is quite expensive to replace, from people who park by sound or any other slight mishap. It is easy to instal, and bolting straight on the bumper bar brackets.

It also serves to protect our Cibie driving lights. These are a new design and are being introduced to Australia. They are virtually a normal

*The Cibie Diode driving lights being fitted at British Leyland's Sydney factory. The units fit straight into the existing mudguard mountings and connect to the normal wiring.*

headlight and driving light combined in the one unit. On low beam the headlights work as normal but when the high beam is switched on it brings into circuit a QI globe housed in a special reflector. The unit will fit straight into the existing housing in the mudguard and wire straight up to the sealed beam connector.

With the Cibie biodes you get the advantages of QI driving lights without having to hang extra lights on the front of the car. For long distance night driving we found them ideal and the illuminated area was more than enough for the speeds travelled. At times a few motorists didn't believe we were on low beam and flicked their lights up: they soon changed their minds when they saw the QIs come on.

To date MG 123 has logged just on 8000 miles and is running as sweet as a bird. #

*The new head being worked at Lynx Engineering. That was the only major modification we did and it made a big difference to the overall performance of the MG.*

*British Leyland mechanic Richard Townsen, tunes the SU carburettors prior to the first run at Mt Cotton. The Lynx air-cleaners made a big difference to the breathing.*



