

# B.R.T. DEVELOPMENTS

*In this series of articles Peter Garnier talks to the men behind the performance and conversion business*



**L**IKE so many people who improve the performance of the standard product, Harry Ratcliffe started by tuning and developing his own car in order to go motor racing. In his case it was a Morris Minor 1000, five years ago, a car that had been sold originally by his father's garage business and then taken back a year or so later. Together with Jim Barham and John Taylor he went all over the country, racing the Minor and having a whale of a time.

At first, the Minor's tuning had consisted largely of fitting conversion equipment produced by one or other of the tuning establishments in the south (there were none, then, in the north and there are still exceedingly few). They discussed their future with Speedwell one day, and were told that if they were planning to go motor racing seriously and be ahead of their opponents, they would have to do their own development; with other people's conversions they could never do better than equal the opposition.

So Barham, Ratcliffe and Taylor went to work on their Minor, even to producing their own fuel injection system. This worked reasonably well—until one day at 75 m.p.h. the car caught fire spectacularly. "If this had happened during a race," Harry said, "we'd have been banned for life," so the project was shelved, although at the time of the fire it was within a couple of days of being raced. So much development by then had gone into the hard-worked Minor that they decided to cash-in on their knowledge and experience, founding B.R.T. Developments and starting in a small way in Harry's father's garage, Ratcliffe Brothers, in Rochdale. They specialized in B.M.C. Minis and A-series engines generally, increasing the compression ratio, recontouring the combustion chambers, and working until all hours of the night. Noise—an inevitable by-product of their calling—quickly became a major problem in so densely populated a centre. Added to this, customers came in such numbers that B.R.T. Developments was soon as unpopular with

father Ratcliffe as it was with the inhabitants of Rochdale.

So they started casting round for other premises—preferably where their neighbours would be the less fussy Lancashire fells. Eventually (in March 1962) they found the ideal place at Littleborough, close enough to be convenient, yet well clear of the labyrinth of small residential streets that had cradled Gracie Fields and sent her off to bring worldwide fame to the town. Their only neighbour is a box factory, whose tea-chests piled skywards give the impression of the *Catty Sark's* hold in the days of the China tea clippers. On the other side are the fells; B.R.T. can now make as much noise as they like.

Though they had not (and still have not) spent a penny on advertising, they quickly built up a considerable clientele, largely as the result of racing the Minor 1000. They have always tried to confine their customers to people living within a 50-mile radius of the works, steadfastly refusing to start a postal service since in their opinion it is risky to let people do their own fitting. Though a large proportion may well be able to do the job properly, the few that "bodged" things would quickly earn for the firm a completely unwarranted bad name. By now their customers consisted half of people who wanted to go motor racing and half ordinary folk who didn't want their insurance companies upset by twin-carburettor conversions yet sought something more exciting than the standard general performance.

As Harry says, they try to weigh up their customers, and to decide exactly what it is that they need. There are the youngsters who want 7,000 r.p.m. in the gears and are immune to whatever noise may result (probably enjoying it). Then there are the more mature types who still enjoy driving for its own sake, even though their driving may be no more exciting than taking the family to the beach at weekends. The second group is easy, but the first presents a bit of a problem. First, one has to decide



just how much performance they're capable of using and, more important, how much they'd be safe with. Harry believes in giving them progressively more, little by little, so they get accustomed to handling it.

Though all this work involved many late nights, they made it a rule to lay down their spanners at around 9 p.m., having established from experience that after this time work began to deteriorate. In the early days of racing the Minor they discovered quite clearly that if you are still working on the car after 9 p.m. on Friday night, there is no point in going motor racing with it on the Saturday; you're likely to have left something loose.

Eighteen months ago they installed what has proved to be their most useful piece of equipment so far, a Crypton Road-Load dynamometer which measures the power at the road wheels. With this they tune the standard engine to give the highest output of which it is capable while adhering exactly to the manufacturers' specification. A standard Mini, for example, goes on to the brake giving roughly 20 b.h.p. at the wheels—and comes off, after adjustment, giving 28 b.h.p.

There is something extremely satisfactory about the device because the customers can watch the dials and see the improvements in output produced by adjustments to the ignition and carburettor settings. It is this visual satisfaction, perhaps, coupled with the fact that no parts are required, that appeals to the northerners' slightly more down-to-earth attitude towards cash. Whatever the cause,

Harry's lane fills with cars every evening of the working week, some to be brought up to scratch on the Crypton and others whose owners have come along to watch, or to talk motor racing round the stove in the workshop. There is almost a club atmosphere about the place in the evenings, to the background accompaniment of cars running at full power on the brake. In keeping with established principles, however, they lock-up at 9 p.m., having worked on an absolute maximum of five cars (usually three or four) since 5 p.m.

Though the racing side of the business continues to expand, and has been augmented by many rally cars (notably from the Knowldeale Club), by far the largest side of B.R.T.'s work is on ordinary cars for ordinary people. Usually they start off with 35 shillings' worth on the Crypton; then, when they're used to the bit of extra power, they come along for a mild conversion . . . then perhaps a less mild one.

John Taylor has left the firm now, and has been replaced by Geoffrey Goodliff from Midsomer Norton in Somerset—whose "Deep South" accent (as Harry calls it) stands out like a sore thumb (or a healthy one, depending on whether you're north or south). Ten years ago Geoff and Harry had been apprentices at A. V. Roe and the two had rallied together and built an elaborate Riley-based special. For five years, while Geoff worked on missile testing and development at Boscombe Down, they had drifted apart.

The company still maintained an active interest in racing, appropriately with Team Red Rose. It was started by the late Derek Astle, and now consists of Harry and Geoff with Cooper Ss (one supercharged and the other enlarged to 1,370 c.c., and each developing 110 b.h.p.), Neville Hodgkin with a Hornet-engined Mini-Cooper, and Brian Redman with a 997 c.c. Mini-Cooper which he runs in hillclimbs. Enthusiasm for modified motoring is still acutely on the rise in this part of the world, so business is brisk; farther north, round Newcastle, it has scarcely been tapped.

