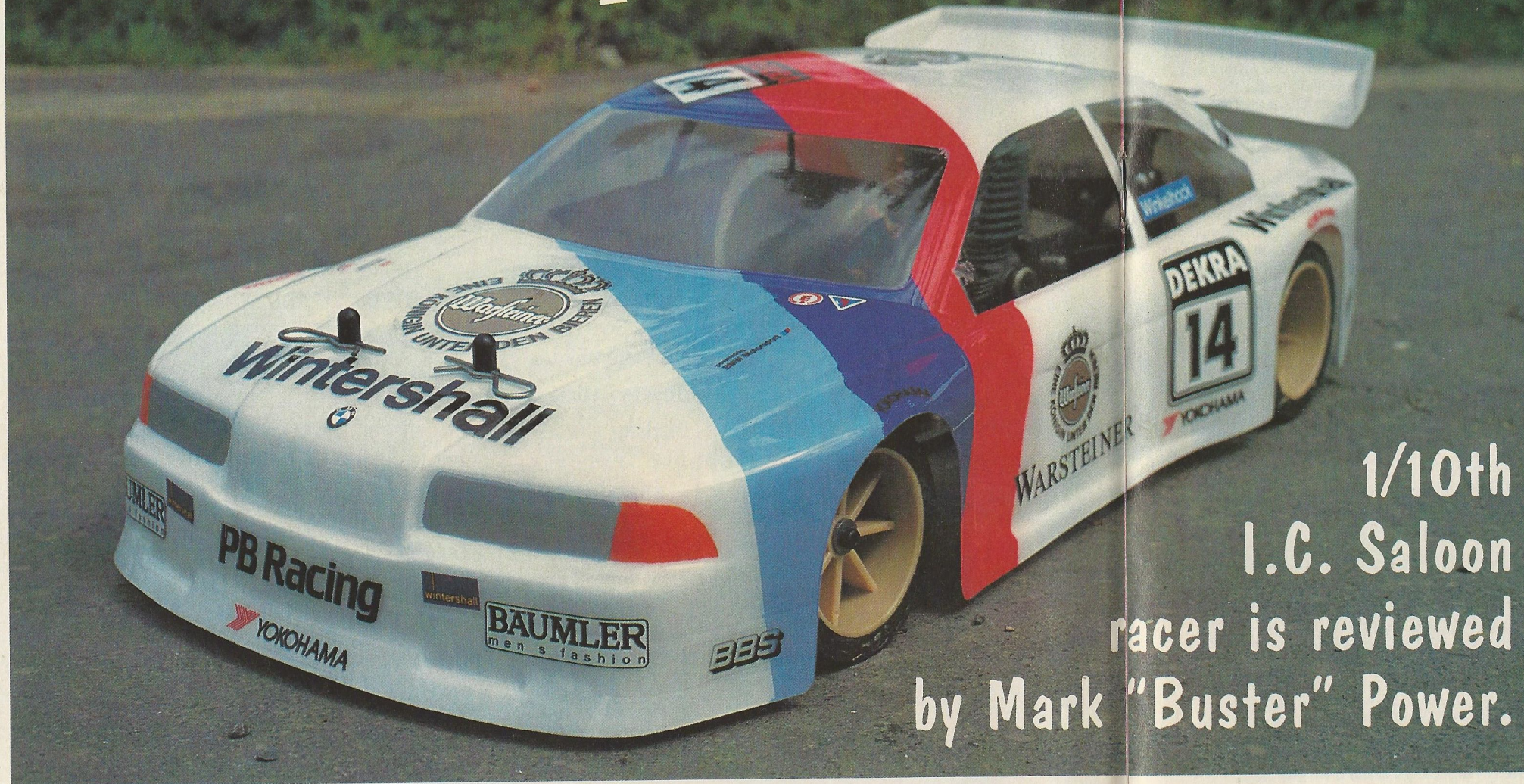


The PB Apollo



1/10th
I.C. Saloon
racer is reviewed
by Mark "Buster" Power.



A substantial front upright.

- reasons, the three most important to me being:-
- 1). Motors that would be evenly matched.
 - 2). Motors that would run in a relatively unstressed state of tune, giving much improved life compared to that of a 1/8 scale powerplant.
 - 3). Chassis that wouldn't allow much development in the power department (i.e. two wheel drive).
 - 4). Saloon bodysells that run in the BTCC, which look much more realistic than a wedge

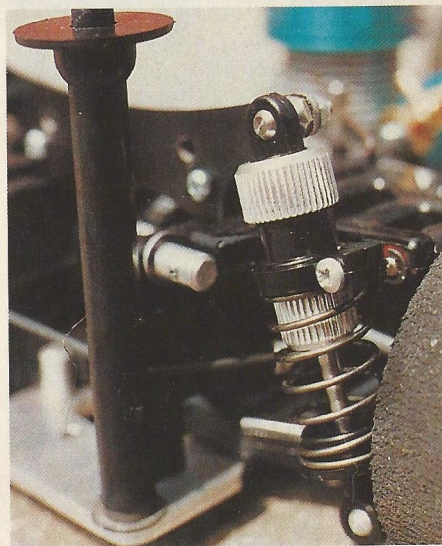
running around a track (I've always liked saloon car racing on the TV).
Altogether, the formula looks very attractive, seemingly offering a recipe for close and competitive racing at, for today's prices anyway, relatively low costs. When the chance arose to review the new PB Apollo, I jumped at the opportunity, as I thought it would be nice to see



Black and natural aluminium looks very smart doesn't it?

Most of the established forms of model car racing seem to be getting more and more expensive by the week. The number of entries in some classes of circuit racing appear to be dropping this year, and I must admit I have asked myself, "is it due to the costs, or are people becoming bored with racing the same old cars?" My preferred class of circuit racing is Pro 10, but in common with many circuit racers I am constantly frustrated by the cost and quality of cells and the differing performance exhibited by the motors available off the shelf. It would seem that the only solution is to possess the ability to spend mega bucks on the latest cells etc, but three children, a wife, mortgage and a dog always manage to find a way of spending my hard earned cash! This situation always results in a lack of speed and poor duration, although I have been told that my style of driving would probably be more suited to ic racing; in other words I am slightly throttle happy!

1/10 IC saloon racing would seem to be the answer to my prayers, as the rules as they stand at present make this class attractive for many



A rear coil over shock and strong body mounting post.



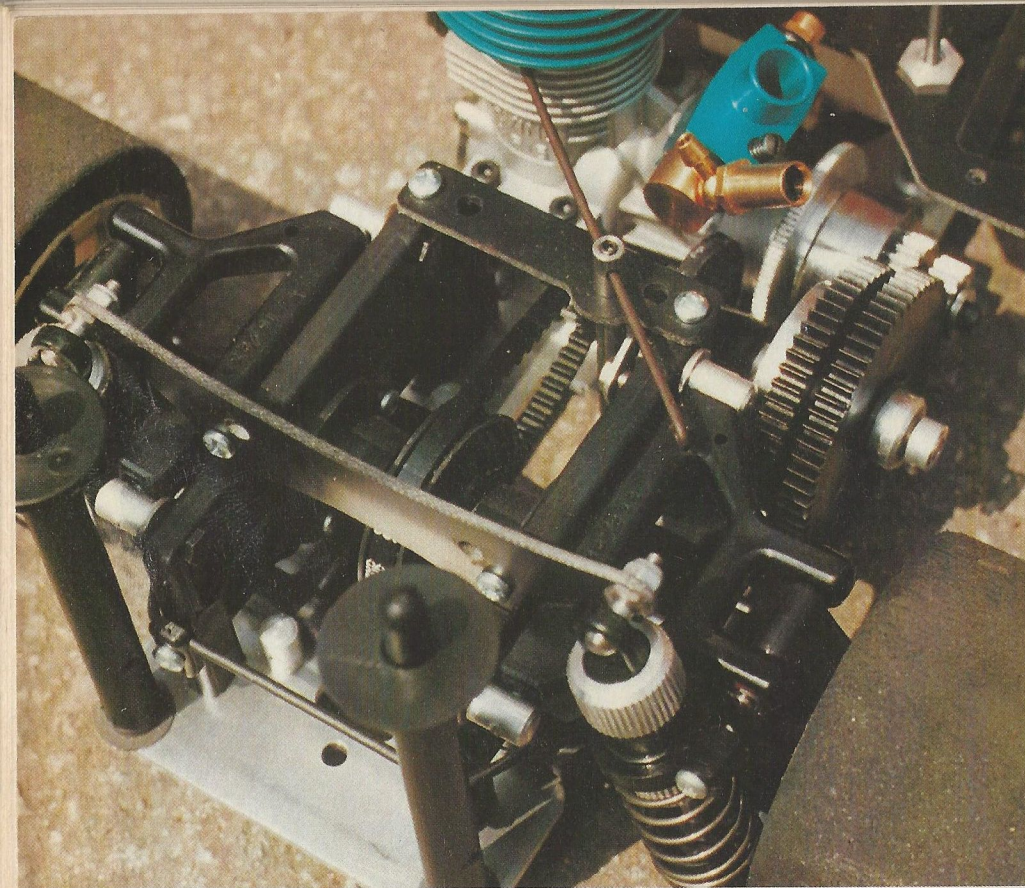
what a British manufacturers' interpretation of the specifications for 1/10 ic racing would be like.

What's it like ?

My first impression on opening the box was one of great surprise at the vast number of



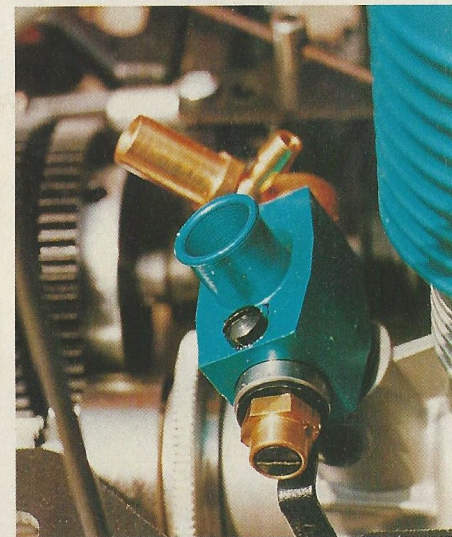
75cc Flip top tank.



The two speed gearbox and disc brake, with the aluminium rear pivot mountings fore and aft of the upper wishbones. The geometry is adjusted with spacers behind the mounting points.

components (nothing at all like the average Pro 10 car kit!). No fewer than twenty one plastic bags containing what seemed like hundreds of different parts. This was definitely not going to be a case of shaking the box and ending up with a ready built car! A comprehensive study of the booklet provided and a thorough familiarisation with the components is advisable before contemplating starting to actually build the kit up. I also found it practical to 'trial build' all of the major sub assemblies of the car prior to the final assembly, to remove any doubts that may have arisen regarding the correct order of assembly.

A look at the major components revealed that the chassis was produced in 3mm thick aluminium, no doubt to provide a good heat sink for the motor, as well as a rigid base for the suspension. The radio plate is made from 2mm GRP and is mounted in such a way that it stiffens the chassis further. The suspension components appear to be of massive dimensions, no doubt a



The Irvine XR-15 with a larger heat sink head. The carburettor has to be turned around 180° to suit the Apollo.



The very thick wishbones are controlled by the scissor spring seen beneath the shock absorber.



legacy of PB's eighth scale experience. However the transmission appears to be rather 'lightweight' in comparison (no doubt time will tell!)

The Front Suspension.

The front suspension is by unequal length wishbones substantially moulded in rigid plastic, the bottom wishbones' movement being controlled by an scissor spring, the tension of which is adjusted by a grub screw bearing against the inner portion located in a moulded housing. The top wishbones' position is adjustable fore and aft along the pivot pin by the use of two plastic spacers, (one thick, one thin) these clip onto the pivot pin to dictate the desired caster angle. A front anti roll bar of strange but effective design is provided, this plugs into the inner faces of the lower wishbones. The aluminium uprights, again of very substantial proportions, contain live axles which accept both the PB wheels first seen on the Sizzler Pro 10 car and all American Pro ten wheels. (A design feature which I am very surprised that all of the other 1/10 ic manufacturers have not followed.) The front suspension is rounded off by two plastic bodied shock absorbers, which come complete with a variety of pistons with different numbers of holes to vary the damping action.

The Rear Suspension.

The rear suspension is again of unequal length plastic wishbones, although of not quite so substantial proportions as those used at the front end. The camber and toe in / toe out adjustment being provided by the use of washers behind the wishbone pivot mountings. The rear upright is a plastic moulding supporting a steel stub axle which, like the front end, accepts all popular Pro Ten wheels. A rear anti-roll bar, of more conventional pattern than that seen on the front, is fixed across the rear suspension sideplates and acts on the lower wishbones. The rear shock absorbers are of the same design as those seen on the front, the only difference being the length of the piston rod. The rear springs are of the coil over shocker variety, with the ride height being adjusted by a sliding collar on the shock absorber.

The Transmission.

The motor supplied for the review car was the Irvine XR-15, the latest version of their 2.5cc car engine. This has a larger cylinder head with deeper finning to aid cooling when used in the saloon shells which tend to restrict the airflow to the motors, resulting in high running temperatures. This motor is basically the same as that used by the Serpent Team, so should give very good performance. The engine mounts supplied in the kit were ready drilled and tapped to sit the Irvine and OPS motors, the fixings being 3mm cap head screws. The centrifugal clutch uses two P.T.F.E. shoes, which I hope will

give a long life and low maintenance. One aspect of 1/10 ic racing that I must admit concerns me, although I am sure that 1/8 racers will be well used to it, is the time that might have to be dedicated to the routine upkeep of the car, as my Pro 10 Corally car needs very little work between meetings to keep in good shape, so I hope this machine will prove to be undemanding, unlike my good lady wife (read into that what you will)!

The two speed gearbox is supplied in kit form to be built by the purchaser, unlike some of those in other kits. To my way of thinking, this allows an understanding of both its operation and its maintenance needs, prior to actually racing the car. This should stand the

The spacers for adjusting the castor can be seen clearly in this shot, as can the joiner for the two piece front anti roll bar.



How did it build?

The assembly sequence was followed to the letter, but the instruction book, having begun well

and easy to understand, seemed to become somewhat less clear as the construction of the kit progressed. A good example is the page covering the construction of the shockers at the beginning of the booklet. This is easy to understand, and all the relevant points are adequately covered, whilst page 20, dealing with the engine and radio installation, could be improved upon as it could leave a novice in something of a dilemma! For the most part though, having a few miles under my belt, so to speak, I experienced few problems.

My choice for the bodysell was the BMW 318i produced by RaceCraft, which, once sprayed in the colours of the Warsteiner M3 used in the German Touring Car Series, looked quite nice, especially when the applicable sticker sheet from Tamiya's vast range of decals were applied. The wing mountings shown will be replaced by more substantial items more suited to the rough and tumble of the race track.

Being an electric car enthusiast, it will be appreciated that all of the items needed to get an ic car on the road aren't exactly falling out of my pit box, the editor apparently falling foul of the same problem, so once the Apollo has been kitted out with the correct type of servos etc, and the tuned pipe fitted, the plan is to first run the car and motor in, get the set up sorted then to actually report on the car's performance at a race meeting. This may be a RRC tarmac round, or a BRCA National, but I am looking forward to running a car that stands every chance of being as fast down the straight as the majority of the other entrants! Full running report in next month's RRC.

Manufactured in Britain and distributed by:- PB Racing Products LTD, Downley Road, Havant, Hampshire. PO9 2NJ. Tel:-(0705) 492310. Also available from:- Ted Longshaw Model Cars. Tel:-(0689) 855313.

Apollo driver in good stead should something go wrong at a race meeting, when a quick rebuild might well prove necessary in a short space of time.

The drive to the geared differential is supplied by a 3mm pitch, 4mm wide belt.

The diff is again in kit form, and is very lightweight in design, being much less substantial than its competitors ball differentials. I have heard that some Apollos have been seen using a ball diff based on that used in the 1/8 Diamond car, but again, only time and a few races will show whether one of these is necessary. The diff action realised is quite smooth, and one aspect of this type of design is that it won't slip due to becoming loose, so it will be interesting to see how it lasts as the gears are exposed to what ever the track decides to throw at them in the way of grit etc!

Wheels and tyres.

The car is supplied with PB's own wheels, and Normal Soft rubber for the rear, with Normal Half Hard being the selection for the front. These tyres are very grippy, but not being of the Jap variety, the wear rate might be rather high