

THE only all-British entries in the 1966 Le Mans 24 Hours are a pair of works Austin-Healey Sprites, and if the performance of the similar cars competing in last year's race is any guide, they'll do very well. In 1965, one of the Sprites would have taken the Thermal Efficiency Index had it not fallen out during the closing hours of the race, while the other car went on to win its class.

Since their Le Mans outing, for which they were specially built, the 1965 cars remained idle until recently, when they were taken over by Richard Groves. The plan is to enter them in a busy programme of Continental and Irish races, supplementing the three-race programme (Sebring, Targa Florio and Le Mans) which the works are carrying out with two new, but very similar cars.

First race on the Richard Groves Racing calendar is the Spa Grand Prix, on May 22, which will be followed by events at the Nurburgring, Dunboyne, Phoenix Park, Hockenheim, Nurburgring again, and Monthéry. The regular team drivers will be Clive Baker, Mike Garton, John Moore and Alec Poole.

In preparation for this busy programme the two Le Mans Sprites have been subjected to a period of chassis development (the requirements of the Nurburgring and Monthéry are very different from those of Le Mans!) in the course of which Richard Groves kindly brought them to Brands Hatch and allowed us to carry out a double track test.

FAIRLY STANDARD COUPES

One of the two cars was still in its 1965 decor, in which form it appeared as an exhibit at the Racing Car Show, last January, but the other had been repainted in the team colours of green and silver, with very pleasing results. Most of the testing had been carried out with the repainted car, for which purpose the normal Le Mans 1,293 cc engine had been replaced by a 1,098 cc unit (actually an ex-Ken Tyrrell FJ engine). Apart from this, the two cars were mechanically identical, although the rear disc brakes on the larger-engined car had been 'purloined' for one of the new works cars, and had been temporarily replaced by a pair of 8 inch drum brakes.

It will probably surprise most people to know exactly how 'standard' these exotic-looking little coupés really are.

The entire front end, including the underpan, is basically normal A35 or A40 equipment, the suspension being standard apart from the use of stiffer springs, and competition valves in the shock absorbers.

The rear end is normal 'Spridget' equipment, apart from the use of slightly softer springs and Armstrong adjustable shock absorbers.

The front brakes have the normal 8½ inch diameter discs, and the works cars run with Mintex XM48 friction material, although a set of softer pads had been fitted on Richard Groves' big-engined car to provide an easier pedal. The rear brake disc diameter is 8.7 inches, and both cars have been equipped with a dual-line brake layout, with tandem master cylinders, to meet Prototype Sports-car regulations.

The cars are provided with a special 7½ inch diaphragm-spring clutch with an organic plate, which the works found gave more cushioning than a sintered plate when the cars were using the 'A' Series gearbox. Now, the normal MGB 'B' Series box is used, and in both cars it is coupled to an 0.8 to 1 overdrive operating on third and



**TRACK
TEST**

by John Blunsden

No 5

Richard Groves Racing's Austin-Healey Le Mans Sprites

Above: The Le Mans Sprite in its new Richard Groves Racing colours of green and silver. This has been the team's main development car, and was equipped with an ex-FJ 1,098 cc engine for test purposes.

Below: Still in its works Le Mans guise, the 1,293 cc engined Sprite is taken round the Brands Hatch long circuit in the reverse direction, which Blunsden found quite a 'revealing' experience!



top. BMC's standard set of competition ratios are used, although the set-up between third and top means that overdrive third corresponds almost exactly to direct top.

Although the Sprites used 4.2 axles for Le Mans, a 4.5 ratio has since been adopted, and both cars have a ZF limited-slip differential. The wheels are Healey's own magnesium alloy castings with 5 inch rims.

Both cars were running on Dunlop R7 tyres, the green (1.3 litre) model on yellow spots, the silver car on green spots, and all the tyres were run at 30 psi. There was also a roll bar difference between the two cars, the green car having a $\frac{1}{2}$ inch bar, and the silver car a 11/16 inch bar.

ALL-ALLY BODY

The Le Mans Sprite body is built entirely of aluminium, the only glass-fibre to be found being the framework of the two bucket seats. A small tubular frame is used to brace the door panels, and there is a strong-looking roll hoop built into the roof of the cars. The alloy cockpit bulkhead is padded with leathercloth, and the result is a very tidy and 'complete' looking interior.

circuit was being used for another purpose. John Moore had come along to carry out some development testing with one car while I drove the other, and we overcame the circuit problem by setting off at 200 yard intervals from under the bridge at South Bank and motoring as far as the bridge just before Clearways before turning round and repeating the drive in reverse. Stirling's Bend the right way round may be difficult, but you should try Hawthorn's the *wrong* way!

It didn't take long for me to discover that the green car had an oversteering problem—the back end would let go very quickly, especially over a ripply surface, and it was quite difficult to achieve a smooth line through a long bend such as Hawthorn's. I had been warned of this beforehand, but the breakaway tendency was rather worse than I had anticipated.

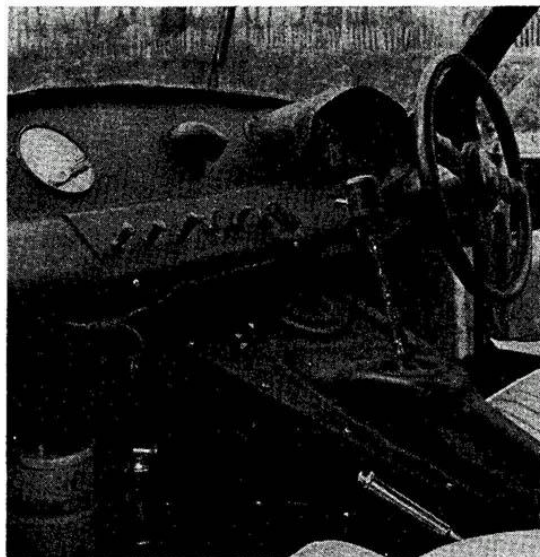
After several two-way runs I stopped to change cars, and discovered a great improvement in handling with the smaller-engined car. John Moore took over the 1,293 cc model, and I was interested to see him stopped and underneath the car a minute or two later. He, too, wasn't expecting it to be that bad! The trouble was soon diagnosed

Engine noise level is quite high in the enclosed cockpit, and it will probably be necessary to increase the ventilation in hot weather. But otherwise the Le Mans Sprite is a very pleasant car to drive, the clutch action is quite progressive, and the gear-shift (a high-mounted lever) fairly rapid and very positive. The steering is nicely geared, with not too much kick-back, but with plenty of feel, and good all-round visibility allows the car to be placed accurately.

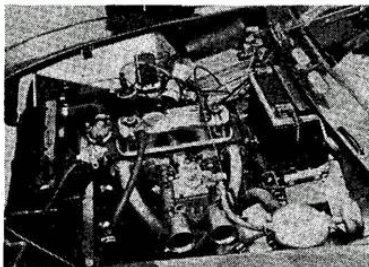
POWER PAYS OFF

The brakes were definitely better on the silver car, the soft front pads on the other car tending to produce some unevenness under heavy braking towards the end of the test. A slight fault on both models was a delay in the action of the tumbler switch on the gear lever which actuates the overdrive. In fact, it was only necessary to use direct-drive gears on the Brands Hatch club circuit, which was used for the second part of the test.

Here it was apparent that life was that little bit easier in the large-engine car, through the corners. In overall lap times the two cars appeared to be over three seconds



Right: Fastback for a fast Sprite, and a large hole through which to replenish a 17-gallon fuel tank—the maximum size permitted by Le Mans regulations. **Below:** Where it all happens! In the foreground, the filler cap of the 2½ gallon oil tank from which the 1,293 cc engine is lubricated. The oil cooler is mounted low down at the front. **Left:** Built for long-distance travel. The matt black cockpit is well equipped, and driver room is reasonable if not lavish. A smaller-diameter steering wheel should help considerably.



A large rev counter, flanked by a fuel gauge and a combined oil pressure and water temperature gauge, is mounted directly ahead of the steering wheel, with the obligatory speedometer well over on the left side of the car. The cockpit equipment includes high-speed heavy-duty wipers, washers and dual iodine vapour headlamps. The rear-mounted fuel tank, holding the Le Mans limit (for a 1.3 litre car) of approximately 17 gallons, is connected up to twin pumps, one being brought in by a reserve switch on the dashboard.

Somewhat expectedly, I found the cockpit (particularly that of the silver car), a fairly tight fit, but the sensible use of sorbo padding here and there had made the most comfortable use of the available space. With a slightly smaller diameter steering wheel I'm sure I could have driven either car for a long distance without provoking many aches or bruises.

The first part of the test took place on the long loop at Brands Hatch, while the short

as a loosened-off shock absorber, and when both dampers were screwed up hard the car's handling qualities were transformed. In fact, in the end it was handling a little better than the silver car, the difference probably being explained by the yellow spot tyres.

PLEASANT TO DRIVE

On a car weighing probably something in the region of 12 cwt, the difference in horsepower between the two power units became very noticeable (the 1,098 was probably producing 92 bhp at the most, while the 1,293 is estimated to be turning out in the region of 105 bhp). The longer-stroke 1,293 cc unit has a recommended rev limit of 7,200 rpm, whereas the ex-FJ unit can be used up to 7,500 to 7,800 rpm, but against that the larger engine has noticeably more torque, and can be used effectively down to about 4,000 rpm, against the 4,500 rpm minimum of the other unit.

apart, most of which would be accounted for by engine power.

Without too much difficulty we both found the 1,293 cc Sprite good for a 62-second lap on the day, and with stronger dampers on the rear improved stability should find a little more time. This is a very satisfactory result for a car which makes no pretensions of being one of the 'paper maché brigade' built for club racing. It is designed, above all, to go and keep going, and although it may stand little chance in terms of all-out performance against the more exotic (and much more expensive) Abarths, its reliability factor must surely enable it to scoop up some useful prizes during the coming season of endurance races.

So let's follow the fortunes of Richard Groves Racing, a private, self-financed outfit with a good record behind it, and an enthusiastic determination to prove that even today you can go International racing on a sensible budget . . . and be successful.