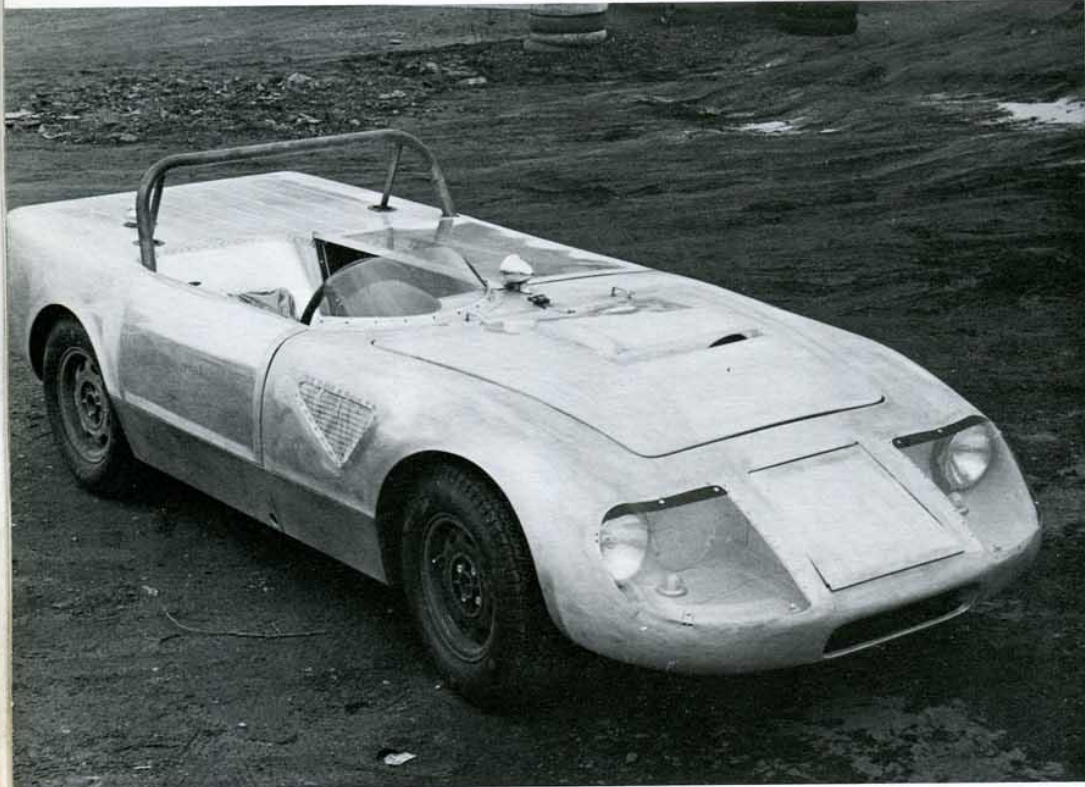


*More Healeys: Frog-eyes, Sprites and Midgets*



*The last racing Sprite built at Warwick: wedge-shaped and light, with a Lucas petrol-injected 1293 engine, four-wheel Girling racing disc brakes and panelled by Bill Buckingham in Birmabright high strength aluminium alloy. This looked so good that we never painted it. The car was sold to Ed Bussey of West Palm Beach.*

more accessible than the Targa Florio and run over a course that was generally considered to be a lot easier, though of similar length. Clive and Andrew took the car to fifteenth position overall, with first place in class.

The last of the TFR series, TFR7, was built for the 1969 Targa Florio, incorporating all the knowledge we had gained on our previous six sorties with Sprites. We started with the basic understructure from John Thompson's of Wolverhampton, from which we cut away all the unwanted pieces like the wheel arches and the flat steel panels, replacing them with hard Birmabright sheet. We removed the gearbox tunnel and substituted a larger tunnel fabricated in 20 gauge sheet steel to take the special 5 speed gearbox. Chassis extensions from the rear of the platform were needed to carry the petrol tank and rear

### *The Targa Florio*



spring hangers. These we fabricated and assembled in the crude jig we had made, welding or brazing them with Eutectic 16, a very strong low temperature rod.

Barry Bilbie and I had drawn up the abbreviated body to comply with the basic FIA prototype sports car regulations, basing the design on the Le Mans coupés without windscreen and top. We added a simple rear end, designed to provide some downward force. The wooden buck on which the Le Mans bodies were built was quickly modified and Bill Buckingham and Terry Westwood set to, producing the body in 20 gauge half hard Birmabright sheet. The completed body looked so impressive that we decided not to spoil it with paint. The excellent corrosion resistance of Birmabright made any protection unnecessary.

The power unit was the last of the Le Mans units. Not many people realized the very special nature of these since we deliberately kept quiet about any developments, the aim of competition being to boost sales to the standard

*More Healeys: Frog-eyes, Sprites and Midgets*

product. The units were based on the 1275 cc Sprite engine with the bore increased by 20 thou or half a millimetre to 71.12 mm. With a stroke of 81.28 mm this gave a capacity of 1293 cc. The blocks were specially cast with a very thick central main bearing web and were fitted with SG iron main bearing caps. A special light alloy sump or oil pan replaced the pressed steel unit and added to the rigidity of the whole unit. The crankshaft of special steel was nitride hardened and fitted with a proper oil seal at the rear.

The heads were new castings, with four inlet ports and sparking plugs on the right-hand side and four exhaust ports on the left. In addition the head castings were Tuftrided, a process that reduced the unduly high incidence of heads cracking between the valve seats. The heads had very small combustion chambers with a resultant compression ratio of 12.5 to 1.

The fuel supply was from a rear mounted tank incorporating a very effective catch pit to Lucas's recommendations. A Lucas fuel pump supplied fuel at 120 psi to the metering pump which was driven by a cogged belt from the crankshaft. The fuel injection nozzles were located upstream in the cast aluminium trumpets with the throttle opening controlled by SU butterflies. The Lucas injection system was very reliable, very effective and surprisingly economical. The throttle response was instantaneous and there were none of the problems with fuel surge on cornering and braking that carburettor units normally give under high G forces. The engines used a dry sump oil system carrying two gallons of Castrol R 30 in a light alloy tank in the passenger's foot well. For these tanks we sought the advice of Wally Hassan of Coventry Climax. As usual he gave us the right information and the air was effectively separated from the oil.

Like the engine, the gearbox was developed by Eddie Maher and his team at Morris Motors' engine branch at Coventry. It was based on the gears used in the MGB, in a special casing with the fifth speed in a compartment behind the main box. These boxes were strong, reliable and a joy to use.

The front suspension followed the basic Sprite pattern, with one of the heavier 3000 antiroll bars. The rear suspension used special Bramber half elliptic leaf springs with adjustable torque reaction rods. Four dampers were fitted at the rear—a pair of adjustable lever arm DAS 10 Armstrongs and a supplementary pair of telescopic units. The perennial problem of damper fade was finally overcome with this set-up, where the dampers were only lightly stressed.

Sadly, this car was never raced by us, although it was ready to run in the 1969 Targa Florio. British Leyland's recent clampdown on competition meant that they would not have given us any support, financial or otherwise, for our entry. Additionally, we knew by then that the Sprite was to drop out of production at the end of the year, and so there seemed little point in going racing with a Sprite. A couple of very good Italian drivers asked us if they could borrow the car for the race but we decided against it, and instead sold it to our friend, Ed Bussey, the MG and Austin distributor in Florida. I was particularly

*The Targa Florio*



*Simple instrumentation on a light racing car.*

disappointed at missing the race: TFR7 had benefited from the most extensive development of all the TFR cars, and certainly promised to have been ideal for the Targa's circuit.

The Targa Florio no longer forms part of the international racing calendar. Despite an exceptionally good safety record, with low average speeds imposed by the numerous bends of the circuit and only one fatality in over 60 years, serious accidents in less arduous races and the introduction of various safety regulations have deprived it of its international status. However, it is still run as a national event for Italian drivers—and Italian drivers having a go provide a spectacle not quickly forgotten. We always considered the Circuito Piccolo delle Madonie an ideal development ground, and a lot of what we learnt was incorporated in subsequent production models.