

SYDNEY'S PIONEERING HOOPER 500

The Sydney-built Hooper 500, which first appeared in January 1948 at Hawkesbury hillclimb, was not quite the first Australian-built 500. But it was the first "real 500," in that it was the first east-coast car to use purpose-built chassis and suspension, unlike the naive, almost clumsy, cars which had appeared earlier. Even more encouraging for the infant Australian 500cc movement, it was the first 500 to make regular appearances, and almost from its initial appearance it proved faster in sprints and hillclimbs than all but the most powerful conventional cars.

Bill and Jack Hooper ran Davidson & Napier, on the corner of Foster and Blackburn Sts in the Sydney CBD, near Wentworth Ave's motorcycle alley and immediately behind the Golf Shop in Elizabeth St, which for many years was famous for its rooftop neon sign of a putting golfer. From before WW2 the business had specialised in motorcycle frame repairs and tube and exhaust-pipe bending; Sid Napier later moved to do the same sort of work in-house for the big motorcycle supplier Hazell & Moore. Historian Brian Green-

by Graham Howard

field recalled Jack Hooper had been a useful grass-track motorcycle racer pre-war; hard to say, then, whether this was an unlikely background to have produced such a well-thought-out four-wheel racer, or whether the Hooper brothers' specialisation in two-wheel machinery meant they had nothing to unlearn.

No question, however, that it was their small workshop and their professional skills which allowed them to build the car in just ten months, and even that time – as Fred Schubach pointed out in his March 1958 story about the car in Australian Motor Sports magazine - involved "working leisurely," and only at weekends.

It was an admirably light and simple car. Schubach wrote that it copied Fiat 500 track and wheelbase dimensions, but otherwise the car was highly original. It had a chassis of two pairs of 1.5 inch 14g chrome moly tube, with cross members and 8" vertical joiners at front, rear and behind the seat. The chassis was said to weigh 80 lbs and the complete car, without nose paneling, weighed 450 lbs.

Suspension at each corner used a short transverse quarter-elliptic spring as a bottom link, and a top wishbone made from pairs of 1.5 x 0.25 inch steel strip, drilled for lightness. Each wishbone pivoted on a Model T Ford kingpin. There were no dampers front or rear, the car relying on interleaf friction. Fabricated front uprights incorporated 1930s Morris Minor axle ends. Fabricated rear uprights used the outer ends of a Minor rear axle with a second bearing carried in a bolted-on machined alloy housing, and later there was a long radius arm on each side. Driveshafts were from WW2 Norton sidecars, which had a powered third wheel.

Brakes were Morris Minor, operated by motorcycle clutch cables; during 1949 the rears, and later the fronts, were converted to hydraulic. Front wheels were 19-inch Minor, rears 18-inch from a Raleigh three-wheeler. Steering was by Model T Ford epicyclic reduction box and drop arm, a beautifully light and compact system. The track rods needed to be mounted ahead of the pedals for space reasons, but if the Ford drop-arm was ahead of the pedals



it would reverse the steering action. The drop-arm was therefore located behind the axle centreline, operating a pivoted fore-and-aft idler arm running between the clutch and brake pedals and connected to the two track rods at its forward end. It was the car's only apparent compromise. It also had some geometric faults, and during 1949 it was replaced by a rack and pinion – mounted ahead of the pedals! – manufactured by Bill Hooper.

Mostly driven by Jack Hooper, the car ran its first year with a heavily-modified 1928 TT Triumph single-cylinder pushrod engine, in which form it was very effective. However, from early 1949 this engine was replaced by a year-old ex-Vic Duggan five-stud JAP, with a big improvement in performance. The engine, the upright Norton gearbox and the final drive axle, were carried between a pair of steel plates running the length of the engine bay and rubber-bushed at the front. On debut the car had simple alloy side panels only, but

Left: Jack Hooper coasting down to the start at Hawkesbury showing the lowered headrest/fuel tank used with the JAP. Photo from Brian Greenfield.
 Right: Jack and cigarette at Leura, January 1952.
 Below: Jack with the Triumph engine at Foley's Hill, February 1949. Photos this by page by Byron Gunther.



