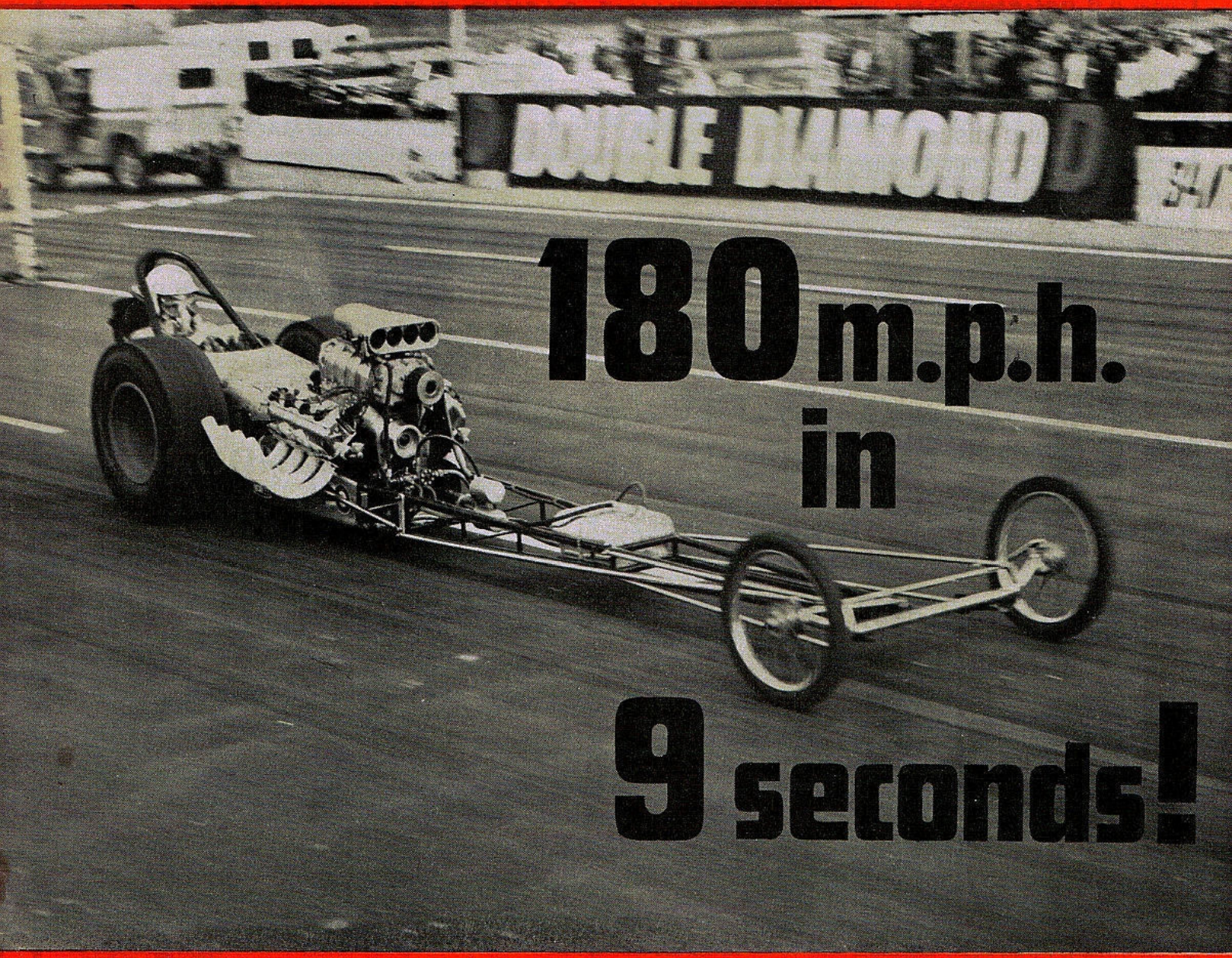
DRAG RACING &

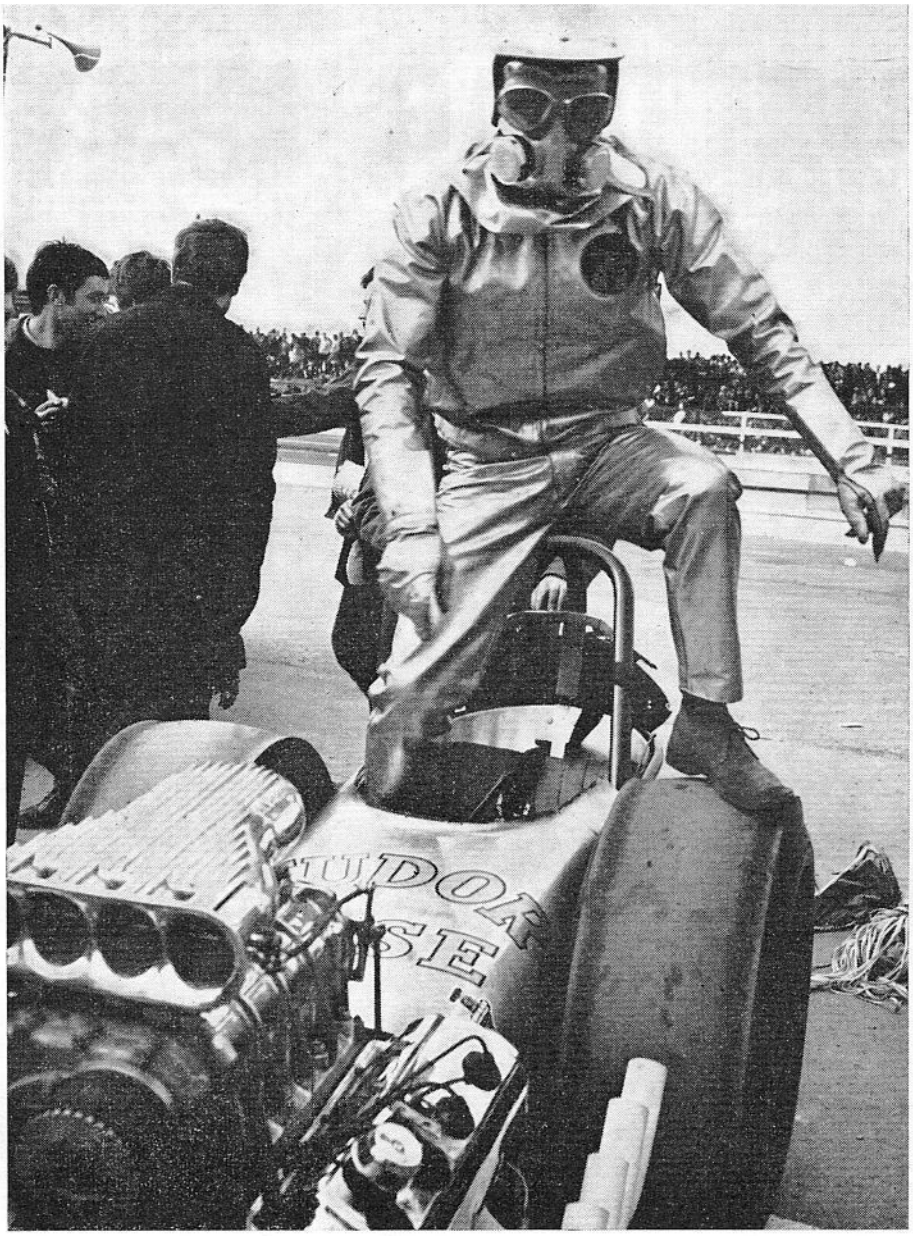


HOT ROD

The only magazine on Britain's fastest growing motor sport

AUGUST 1968 2s. 6d.

in this issue



TUDOR

Sluggett-Priddle Chrysler V8 Powered A/Dragster

POSSIBLY the car with the greatest quarter mile potential to have yet reached these shores bar none is "Tudor Rose", the superb double A fueler co-owned by Rex Sluggett and Dennis Priddle from Yeovil, Somerset. Rex hails from Bude, Cornwall, but stays with Dennis at Yeovil to be nearer his machine and nearer to Santa Pod, come to that.

The rundown of components reads like the proverbial who's who in drag racing today but some background info. before we relate the spec. of this rail that has already achieved 179.53 m.p.h. to be the fastest ever British owned dragster.

Rex is 21 years old and early last year took himself to the sunny shores of California to see the drag racing scene for himself. Whilst there he ordered the power unit and various other parts essential for high speed also he looked, watched, listened and heard all that he could in the short time available.

On his return the payment was made to Keith Black, none other, for he was the choice of engine builder, world wide being his reputation for skill and integrity. For various reasons the engine did not arrive until October last, this being the reason for the absence of this much rumoured car all last season. If you haven't got an engine you haven't got a rail and it would be impudent to go too far with the other fittings until the engine is available to try for size.

Dennis Priddle, Rex's partner, is the engineer in the partnership, being 22 years old and a draughtsman at Westland Helicopters, Yeovil, where Tony Gane, his friend, also works. At this point sackcloth and ashes are being heaped on this scribe's head for last issue he incorrectly credited Tony with the frame's construction, being confused, as others have been, by which handle belonged to whose face. Very naughty—sorry, Dennis.

As a historical point, in the short annals of British drag racing it will be remembered that Rex's first rail was also Chrysler hemi powered, as "Tudor Rose" is, but was Potvin front driven G.M.C. blown with side mounted Hillborn injectors, in fact just as the Skilton-Allard is today. The almost stock Chrysler was equipped with a Crower cam kit and Vertex magneto. Bob Keith, team captain for the Second Dragfest, was instrumental in getting a pair of Halibrand mags quickly flown over for Rex so that he could debut the car at the final round at Woodvale. Treaded racing tyres were fitted to these mags. Alas the engine would not fire. The next season "The Duke of Cornwall' for that was the name chosen for this machine, appeared briefly at Santa Pod but blew up, being the last we saw of this gallant first effort.

Deciding to cut his losses and start again, Rex sold off several of the parts. Jeff Theobald, of Exeter, remembered for his two Jaguar powered rails the second being supercharged, has apparently purchased the G.M.C. blower and injector kit to fit to a Chevy based rail he is building. Jeff, of course, was reported in this magazine at the Easter meet when he competed in his black Daimler "Dart" SP250.

Now to the rundown, technically speaking that is.

Power unit is nothing less than a 426 cubic inch Chrysler hemispherical head Marine type engine built up by the master himself, Keith Black, of South Gate, Southern California.

The engine has been line bored so that all mating surfaces are flat and true and bore has been taken out 0.030 inches so that the swept volume is around 432 cubic inches now. Keith Black always uses a stock stroke so that his crank modification is concerned with making the oil passages more efficient.

By the way, it is thought that the main reason for the crank failure discovered after the Easter meet was oil and now that the team have switched to Bardahl with S.T.P. added they feel more confident and we all hope that such a maladies are over and done with. When told on the trans-atlantic telephone of the trouble Black was a trifle perturbed having fitted the crankshaft himself but most certainly he was not in error, the boys assure the writer.

The crank runs in Federal Mogul bearings and from the crank Mickey Thompson heavy duty aluminium connecting rods push up Forged true pistons of 7:1 C.R. surrounded by Perfect Circle second and oil rings and Dykes top rings.

The cylinder heads have been carefully attended to each hemi-combustion chamber being equalised to a c.c. Inlet ports remain standard size at 5/16 inch but the exhaust ports have been opened out by Black to 1.95 inches. Both sets of ports have been smoothed and polished. Headers are "zoomie" slick cleaning pattern.

The camshaft at present fitted is a so-called "stock" item but, despite its profile allowing for street use in unblown cars, is pretty wild. An Engle cam kit has been ordered for fitment when the present potential of 1,250 b.h.p. on methanol has been realised.

Keith Black "Purple Stripe" double racing valve springs are fitted and these work in conjunction with stock tubular push rods and Keith Black modified tubular lifters.

Above all this sits a G.M.C. supercharger set up by Gene Mooneyham who works for Black. Gene has pinned the rotors and set the clearances meticulously. The puffer rests on a Cragar manifold and is driven by a 3 inch wide toothed belt around pulleys on a Cragar blower drive unit so that the blower is overdriven by 22 per cent above engine speed. With the high pressure settings in the equipment the theoretical boost is around 20 to 25 p.s.i. above atmospheric.

Right at the very top of the pile is the Hilborn low profile open injector with

horizontal orifices, this being the only equipment like this in the country to the writer's knowledge, for both "Commuter" and the "Dos Palmos" cars have vertical chokes.

The Silaro "Vertex" magneto is locked in, providing sparks to the Champion racing plugs. Behind this passing power along the transmission is a forged aluminium flywheel with sintered bronze facing mating to an 11 inch diameter Shiefer clutch having Velvet touch linings. Keith Black insists upon non-slipping clutches for safety. These components are covered by a Donovan bellhousing and then coupled to a direct drive unit from this same famous manufacturer. To save weight the third member of the Donovan narrowed rear axle is a Mickey Thompson magnesium unit. The rear axle has quite a history, being basically a 1949 Oldsmobile unit thats casing has been reduced in width to 26½ inches with half shafts remachined by Donovan to suit. A 3.23:1 crown wheel and pinion is fitted. Originally this axle was fitted to "Hawaiian I" so has done well over 200 m.p.h. before being sold to Rex, after being rechecked thoroughly, of course. Girling disc brakes replace the American items once fitted, coming from a Ford G.T. 40 racing car, being of the ventilated type 12 inches in diameter.

ROSE

Story : BRIAN SPARROW
Pics : JOHN BENNETT

Hiding these stoppers are the 16 inch diameter Halibrand magnesium wheels shod with 11 inch wide "Goodyear" "Blue Streak" Dragway slicks. A set of B35 mix smokeless Goodyears are to hand should the competitor warrant their use.

Touching on "Hawaiian" again, this actual engine was the one Black built prior to screwing together a similar engine for "Hawaiian II".

At the other end the front wheels are practically all that remain of Rex's first attempt, being Allard "Dragon" wheels having 2.25 inch wide steel rims spoked to aluminium hubs revolving on "Anglia" spindles.

The frame has a wheel base of 178 inches identical to that of the Don Long frame on "Hawaiian II". In fact forward of the engine the frame layout is a carbon copy of Don Long's design but behind the unit it is a different story as it is drastically modified being similar only in certain details.

Front axle is dropped and the steering geometry is a Priddle design based on the split-track rod central bell-crank principle. The bellcrank has a stop to control its movement in a horizontal plane. Single tubular radius arms control the location of the torsion bar suspended axle mounting the previouslly noted cycle wheels. Stainless steel Rose/Heim joints are used on this layout. All the tubing used just mentioned is chromium plated in the best manner.

An Austin "Ruby" pre-W.W.II steering box is used mounted in the usual place to control a crossshaft to the drop arm for the split drag link which is also plated in chromium. Turning all this is a butterfly tiller, with wooden grips, at the end of the steering column supported by a plate bolted to the top of the huge axle centre section. A simple tube hand brake comes easily to the right hand [as the best hand

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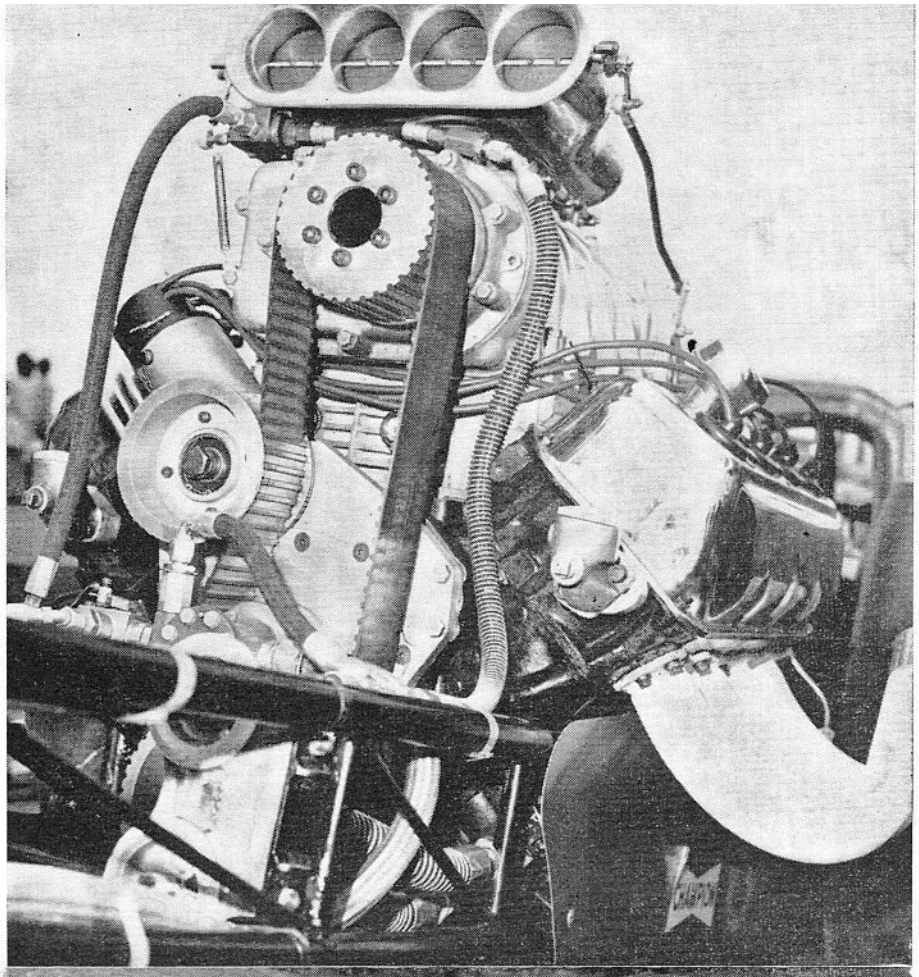

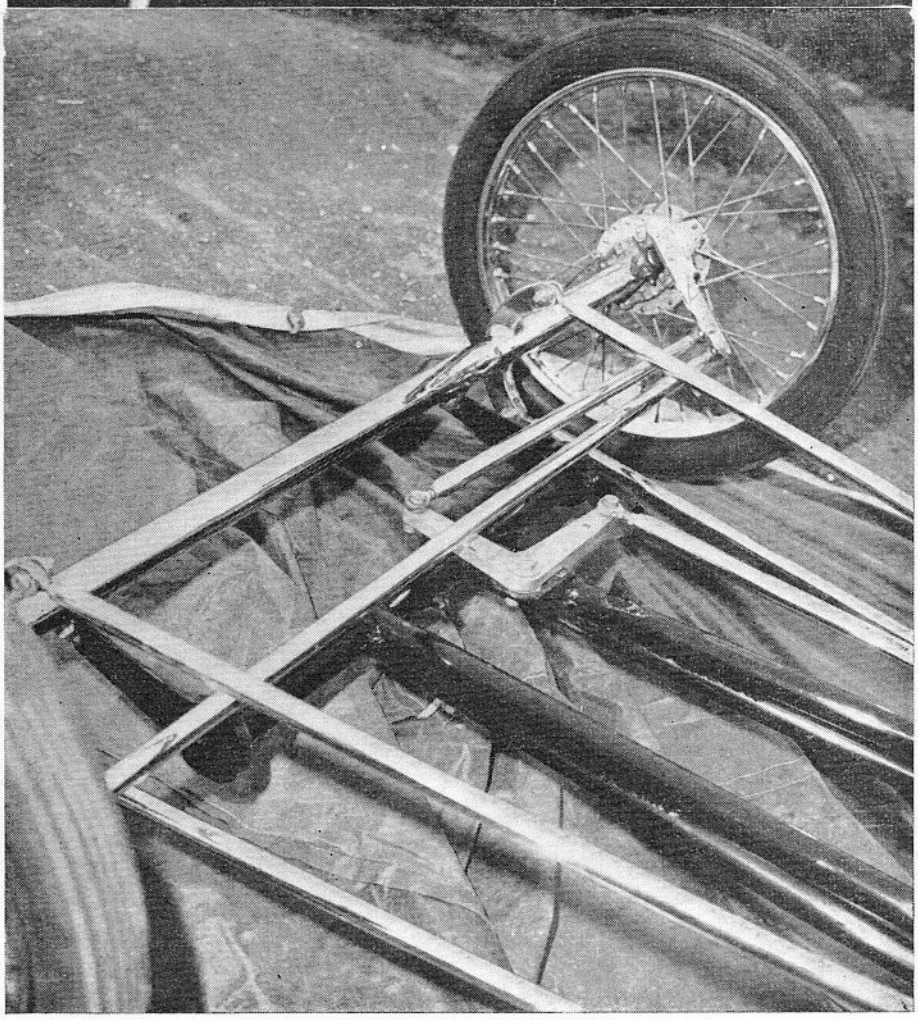

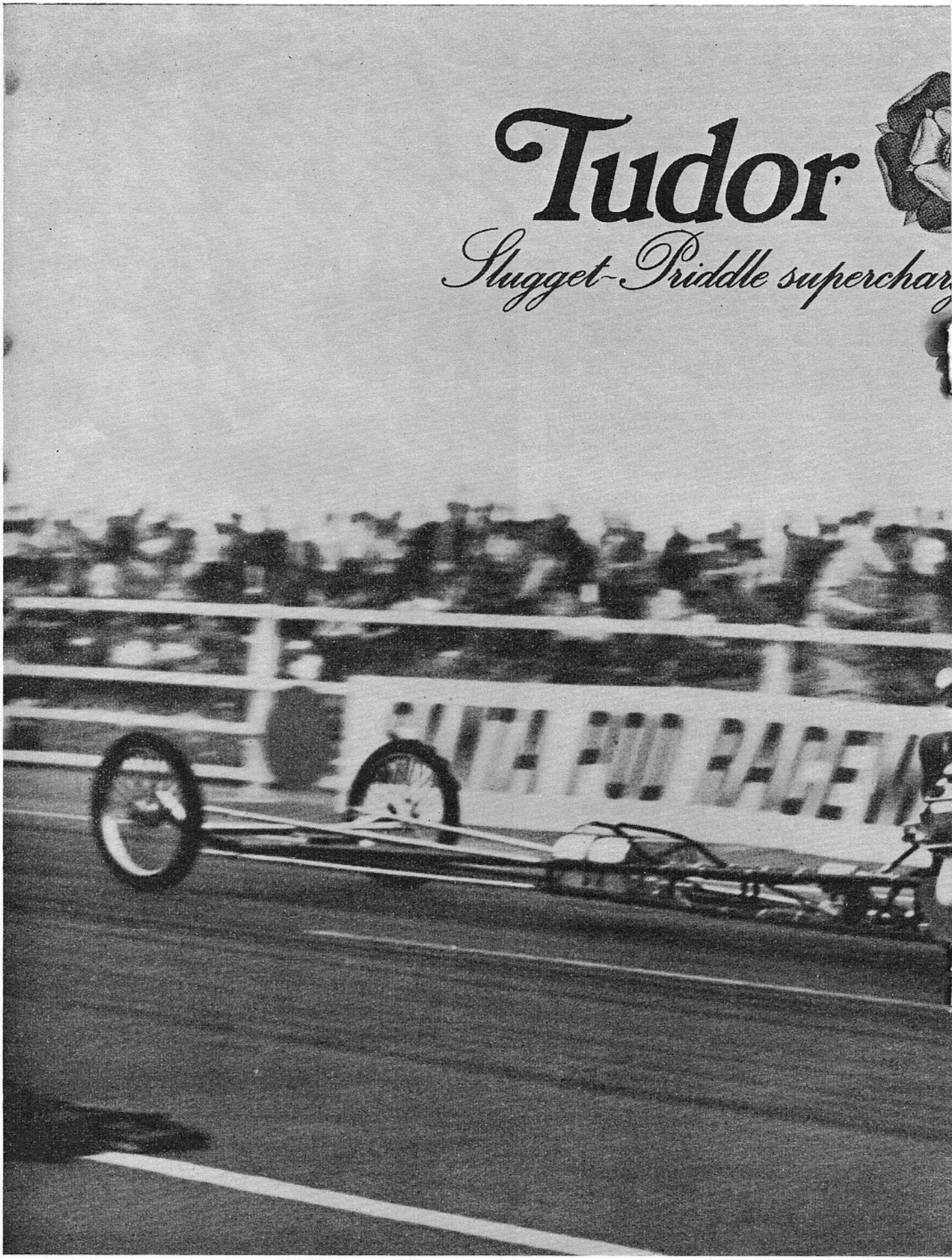

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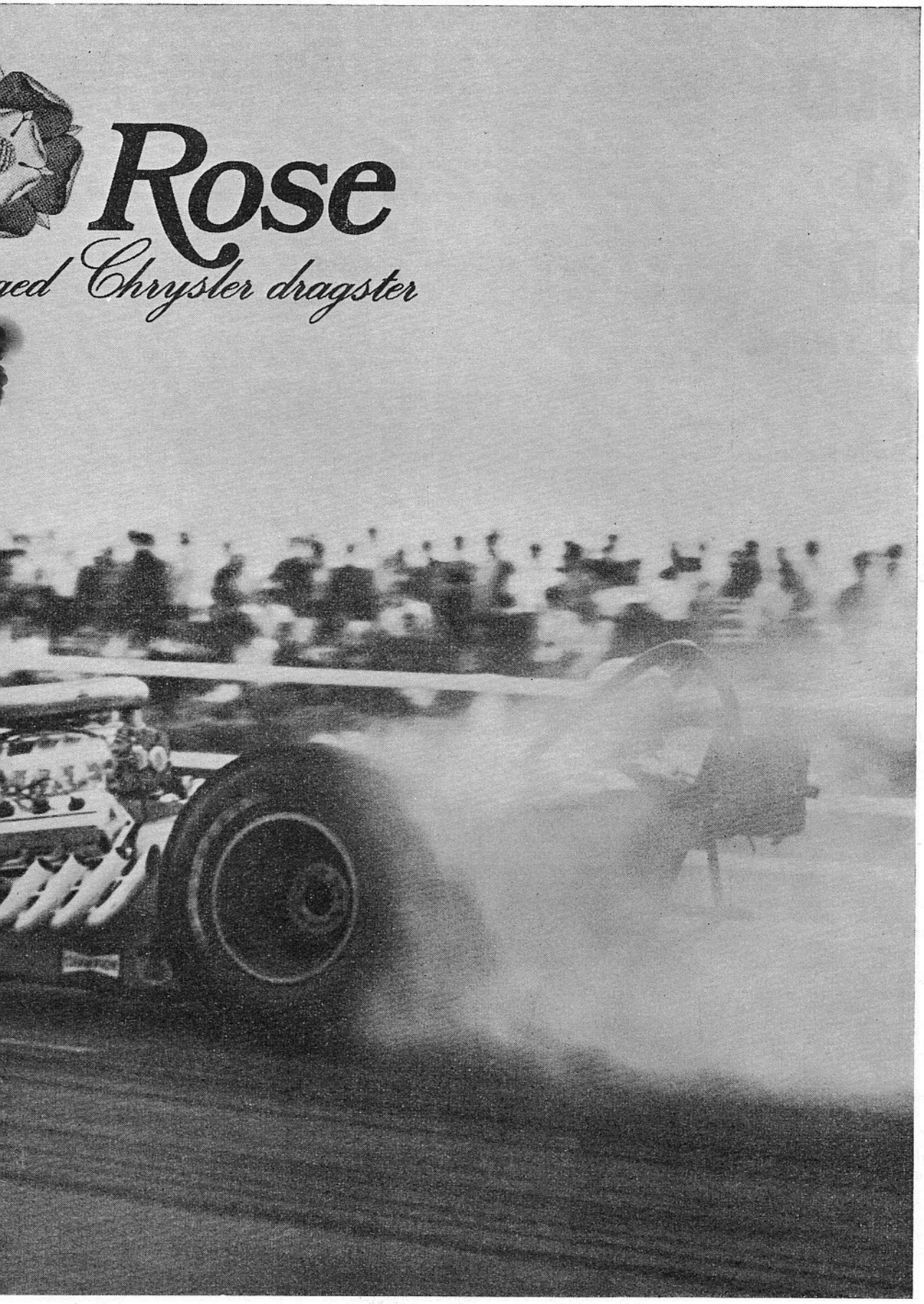

D MAGAZINE" PHOTOGRAPH

books say!], no knob is fitted to it. Tubing is all aircraft quality mostly to T45 specification.

The main frame consists of 17 s.w.g. x $1\frac{1}{4}$ inch diameter in front of the power unit being sleeved at the engine into 17 s.w.g. x $1\frac{3}{8}$ inch diameter tubing that comes on the aft of the motor. Diagonals and other braces are 18 s.w.g. x $\frac{3}{8}$ inch diameter. Roll cage is 12 s.w.g. x $1\frac{5}{8}$ inch diameter T.60 specification tubing with the front axle in 10 s.w.g. $1\frac{1}{2}$ inch diameter tubing also to T.60 specification.

Weight of the frame complete with brackets is 106 lb. Colour is glossy black. Body panelling is also the work of Dennis, being formed from 18 s.w.g. aluminium. Paint is by Calbrook Cars with our old friend Graham Helps applying Candy Pearl Aqua Blue. Dennis' uncle is responsible for the gold leaf lettering and at the time of writing the Tudor Rose itself had yet to be painted inside the circular laid out name on the scuttle top. Also race numbering is yet to be added.

Upholstery is by Ray Prichard in rexine being in actual fact a pattern for the final job, which should be fitted by the time this story is printed, in Scotch Kid leather.

Drag 'chute is a Simpson 14 foot diameter "cross form' 'type being the "200 PLUS" model. Colour is blue, to match the bodywork, being folded in a black pack which is not enclosed in a streamlined tail it being the current trend to dispense with streamlining to save as much weight as possible now that the latest slicks allow for all the horses to be used.

The 'chute is operated by a small trigger on the left hand side, rather than an "O" or "D" ring that the driver pulls smartly.

Bill Simpson is also responsible for Rex's firesuuit, gloves and face mask, also the full harness. Actually Bill saw this installation when he was at Santa Pod on holiday from California at Easter time.

Ahead of the engine is the fuel tank, this being made up by a sheet metal worker friend of Dennis in aluminium, argon arc welded. Dennis made up all the fittings and inners and provided a snap shut quick action aluminium fuel filler cap. Square ledges are incorporated in the tank's shape so as to snugly rest in between the front rails; capacity is $3\frac{1}{4}$ imperial gallons. Fuel used so far is straight methanol nitro being a corrosive substance that makes engine maintenance more of a headache and more frequent oil changes a necessity. Naturally in time nitro will be used but quite likely not until next season.

Weight of the car has been worked out at around 1,320 pounds, a pound for every foot the car races.

What of the performances to be expected? Quoting performance figures out of the air is always a risky business and it has been the writer's practise to err on the conservative side when b.h.p. and speeds are mentioned by maybe as much as 15 to 20 per cent. In many cases only an actual brake test would give any accurate results for no parallels are available for assessments.

However, in this instance, neither the writer nor the crew of "Tudor Rose" need "guestimate", for Keith Black himself, a man of the highest integrity, has stated some performance figures as a yardstick for this 426 Marine hemi.

The car at present is giving around 800 b.h.p. and still on straight methanol, can be tuned in safe increments up to 1,250 b.h.p. before the Engle cam need be used and finally with the cam tipped in increasing doses of nitro well over 1,500 b.h.p. should be realised so strong is the motor. The initial stage will require much adjustment to suit our climate but should be attainable by the end of the season providing the weather is kind.

With this power Black claims that over 200 m.h.p. and high seven second runs will be possible which seems quite enough for this season—still on methanol remember. Fortunately the boys do have access to a local airstrip for tune up runs so can tweke a bit more between race meetings. Really this is an exciting prospect for the remainder of the season—and drag racing in Great Britain.