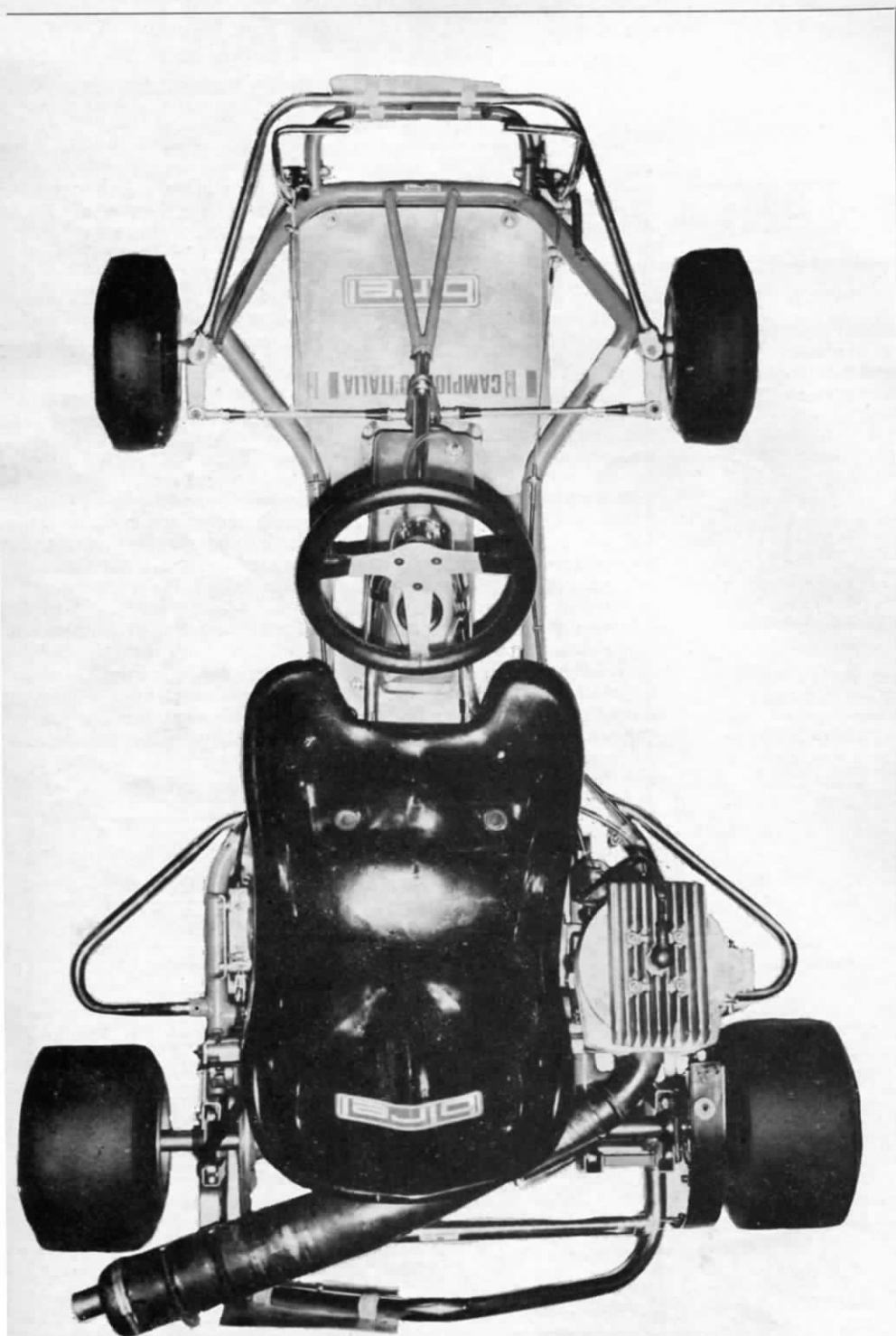


# THE EQUIPMENT AND PREPARATION FOR WINNING THE WORLD CHAMPIONSHIP



"How to win" dominates every kart drivers attention and what better illustration of the hard work, long hours and high skill needed than to examine the schedule for the Fullerton family for most of this year. For some time they have had only one goal — to win the World Championship at Nivelles and we reported in the April 1973 'Karting' the progress they were making towards that aim. This article is to fill in the gap of their story from the Spring of this year to their ultimate triumph at the Championship.

In 1972 the Fullertons were using Barlotti karts but despite the large number of top drivers, including Goldstein, using the Taifun, they refused to follow the trend like sheep. However, since the World Championships in Italy at the end of 1971, they kept an eye on the Birel having been impressed by Necchi's kart when it seemed to hop less than most other makes. At this year's Champions Cup meeting at Jesolo, Terry tried out Oscar Sala's Birel and found it easier to drive on the flat-out corners than his own. The decision was made to transfer allegiance to the Italian make and Dad Fullerton went out to the Lissone factory both to have a good look around and to bring back a chassis. When it was first tried out at Rye House, the times were found to be no quicker but the kart felt easier to drive and the chassis suited the bumpy track very well. Fractionally it was heavier than their much lightened Barlotti and complete with Terry comes out at some 4 kg over the minimum weight permitted.

The correctness of their decision came with the European Championships at Munich where the Birel outhandled the Taifuns on their home track. A couple of weekends before the World Championship, the three Fullerton males made the not inconsiderable investment in time and money for private testing in Belgium and met up with Sala who had brought them a second chassis. Both karts were tried with the same engine and set-up and it is a measure of the accuracy with which they are built that Terry couldn't identify which one he was driving at a given time. The widest spun pattern wheels available were used on the rear with Goodyear tyres at 27 lbs. sq. in. on the engine side and 28 lbs. sq. in. on the other. The front tyres were Continentals at 18 lbs. sq. in. on the offside and 19 lbs. sq. in. on the nearside. Trials with 5" wheels on the front showed that there was a slight tendency for the kart to carry straight on in corners so they reverted to 4". All the tyres were carefully bedded in — and this can take a long time with some makes — until they were

◀ The side nerf bars neatly fill and protect the space ahead of the rear wheels. Without being startlingly different, the Birel still manages to express functional beauty.

KARTING

considered to be in a perfect state for the Championship with sufficient spares available for any eventuality. The rear tyres were run in tubeless form but not with the racing type valve because of its weight. All the wheels, both front and rear, were balanced using adhesive lead weights. Only true running wheels (decided by selection) were taken and the Goodyear tyres bearing the code letters "MAL" used because of their better handling than some other versions.

The Birel hydraulic disc brake with its fixed disc was found to operate extremely well and the only change made was for extensive drilling of the disc. They were pleased to find that the standard Vevey exhaust system they use fitted neatly within the rear bumper of the Birel and was not catered for as an afterthought as on some makes of kart.

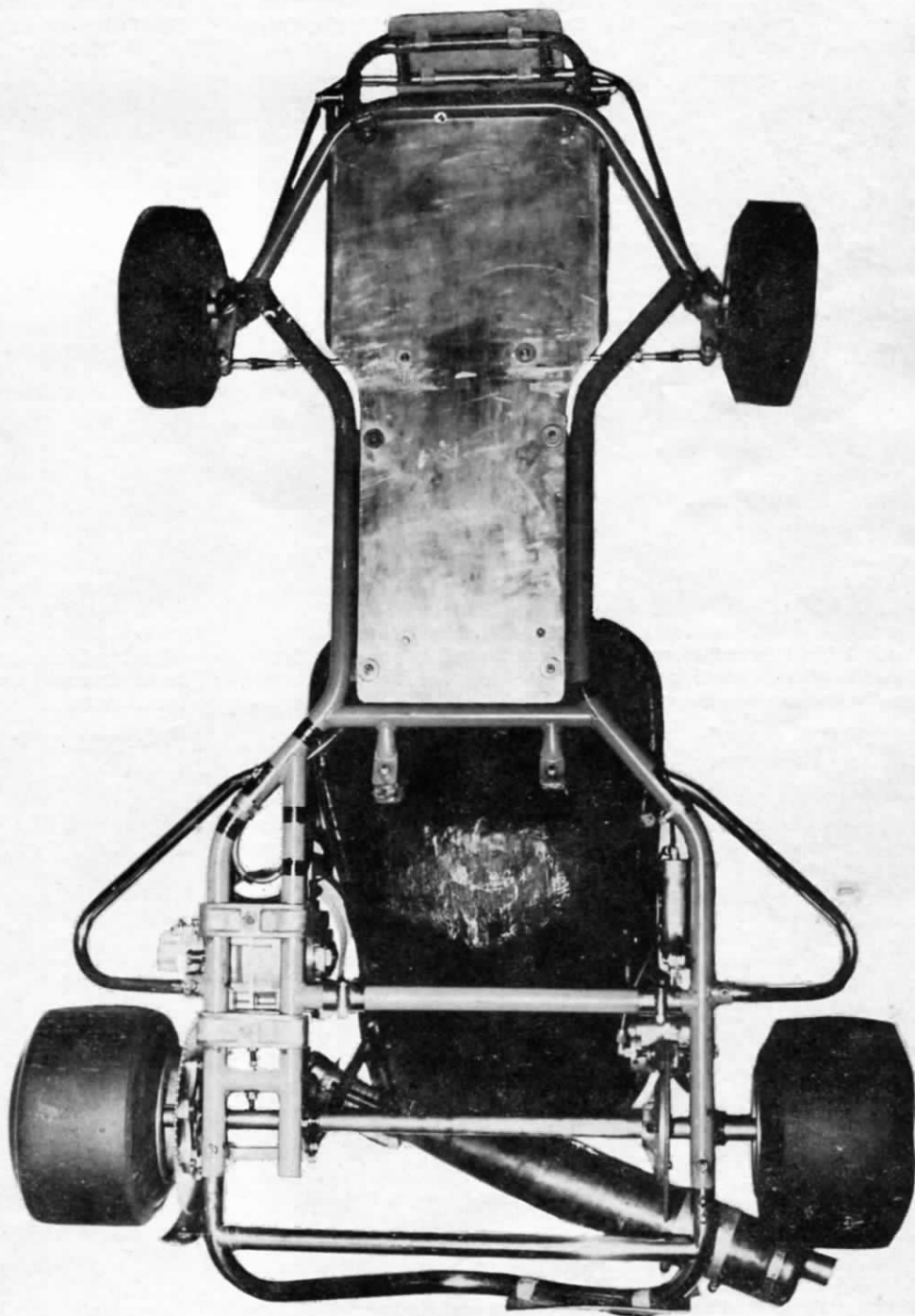
On the motor front there were basically four engines to consider, all Komet K88s. Two of them had been used at Munich to beat Goldstein, one of these having run at the World Championships in Sweden in 1972 and had been rebored whilst the other had been bought commercially over-the-counter in England. Two factory prepared TT models of the K88 were handed over by Sala when he met them at Nivelles. All of the engines were equipped with Motoplat transistorised ignition, modified Tillotson carburettors and of course altered internally with the Fullerton secret and masterful touch. After considerable back-to-back testing and further tuning plus a further private testing session at Nivelles just days before the Championship they had sufficient indication of the relative power of the motors. One of the TTs failed to improve as much as the other after tuning and it was therefore the best TT which was used in the last two heats and the last final with the Munich engine doing service in the first heat and the first final.

Naturally all the equipment was checked and double checked for signs of weakness or potential failure and any part, at all doubtful, changed for new. Some things of course you can't guard against but at least items such as big ends and spark plugs either fail after a couple of laps or so or seem to last for ever. The preventative maintenance schedule continued right through the meeting and there were constant checks for things like cracked pistons. At least some respite has been granted by the use of electronic ignition which provides additional reliability although no improvement in performance. Much time was spent on making sure that all parts interchanged rapidly and they can change

engines in about five minutes because there is a quick release on the throttle cable and a riveted Regina chain already looped to each engine at the right length. The coil is mounted on a special bracket to the flywheel case and just by releasing the two bolt engine mount the whole motor can be lifted away. Because of all the testing sessions and practice, no time was wasted in sorting things out for the actual meeting. Certain changes were made due to the event itself as conditions altered and when, for example, Goldstein suddenly improved by about 0.2 secs per lap by using the illegal German modified engine and when Fullerton found himself well back on the grid for the

first final, they changed from a 66-tooth sprocket to a 67.

Perhaps the finest thing that comes out of the Fullerton success in the World Championship is that they did it with no more money or free time than anyone else involved in the sport. In other words, if you are a better driver than Terry, are more thorough in preparation and a better tuner than the Fullerton family — then you too could be next year's World Champion! If you don't have such high flown aspirations there is still no reason why you shouldn't considerably improve the standard of your competitiveness in ordinary club racing by adopting the Fullerton systematic and methodical approach.



The engine is secured by two single-bolt clamps. Two cross members and the distinctive upswept rear bumper stiffen the rear portion of the chassis.



Ohlsson of Sweden and Mark Steeds have a duel with their pony-tails flying.



The Fullertons have a committee meeting to decide how to set up the kart for the crucial first final.



Derek Wright in rather an old-fashioned seating position. Both Canadian drivers came nowhere in the finals but it was nice to see the country represented.



Whilst officials ingratiate themselves with Goldstein, Fullerton makes mental preparations for the fray and brother Mick provides moral support.



Santini, Italy (56) ahead of Bliss, Bousquet and Korten.



Terry would have been the winner even if 5th in the second final. Note strain on his brother's face (far right).

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