

TAL-KO'S TKM MY-HAVEN'T YOU GROWN!

Eighteen years ago, with much assistance from a street guide, I found my way to the tiny premises of Talko in London's East End. There I met for the first time Bernie and Elsie Turney and their baby, Alan, in a converted shop. At that time, unless one owned Trokart, it was considered affluent to have premises of any sort as most manufacturers seemed to occupy dingy sheds at the bottom of a garden. Since those days, by dint of much hard work and careful business management, they have expanded to the point where they now occupy a tailor-made brand new factory in an industrial estate some forty miles from London and ideally situated next to the A1.

The location may have changed but the family attitude to the business remains the same. Bernie lays down the law with suppliers and staff, like a Sergeant Major, so no one can be in any doubt as to what is expected of him and the main objective is to sell to the trade rather than to retail customers. Elsie is the conductor of the Accounts orchestra and her iron hand is renowned internationally. Many a strong man has been reduced to a quivering jelly on receipt of one of her legendary phone calls seeking payment of an overdue account. Naturally Alan's abilities have only become apparent in recent years but all the same it comes as quite a surprise to see how a very ordinary youngster has developed into a skilled craftsman who would command respect irrespective of whether in a family firm or as an employee elsewhere.

The Turney's don't waste their brass and they always insist on value and quality for the money spent. The new factory is both well designed and built so that they could probably expand three-fold before having to enlarge their premises. Even this eventuality has been prepared for and the plans exist for a second building alongside the first on land they already possess. All of the little touches which can make such a difference to the easy running of a

manufacturing company, such as the heating, access doors, racking and prepared electrical connections, have been incorporated.

Machine tools are extremely expensive these days and British industry is often criticised for making do with obsolete or worn equipment but Talko have a firm policy of buying only the best, despite the heavy financial commitments involved. Although less spectacular, much more care than usual has gone into the manufacture of precision jigs to ensure rapid production to very close limits of accuracy. Most of these have been made by Alan Turney and will repay the laborious effort involved many times over in the future.

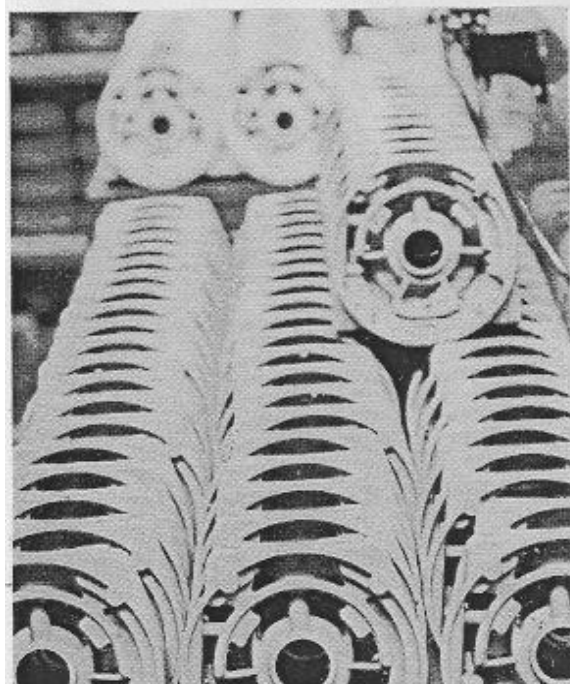
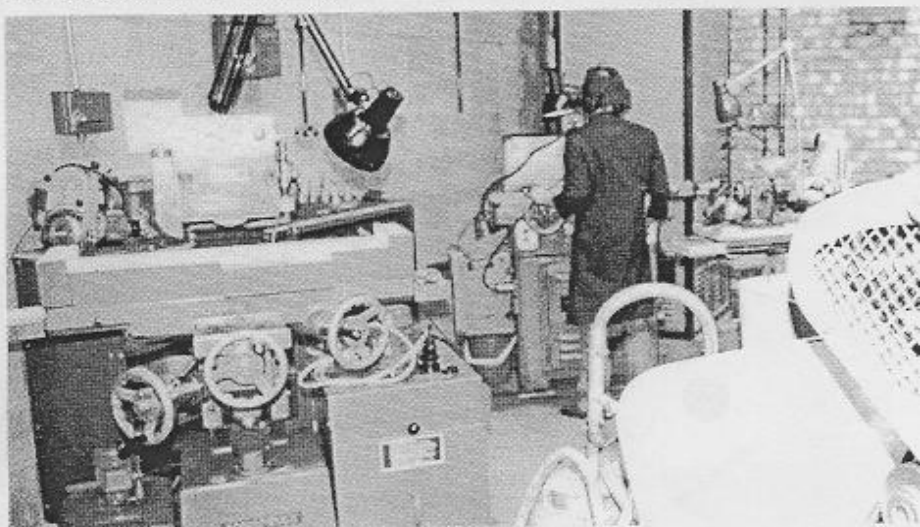
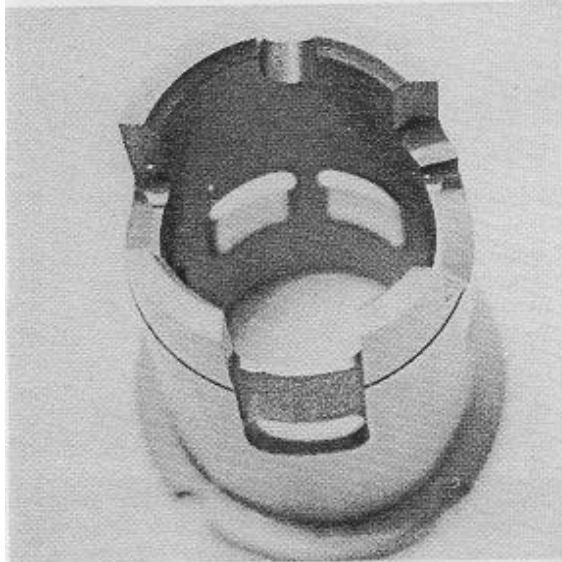
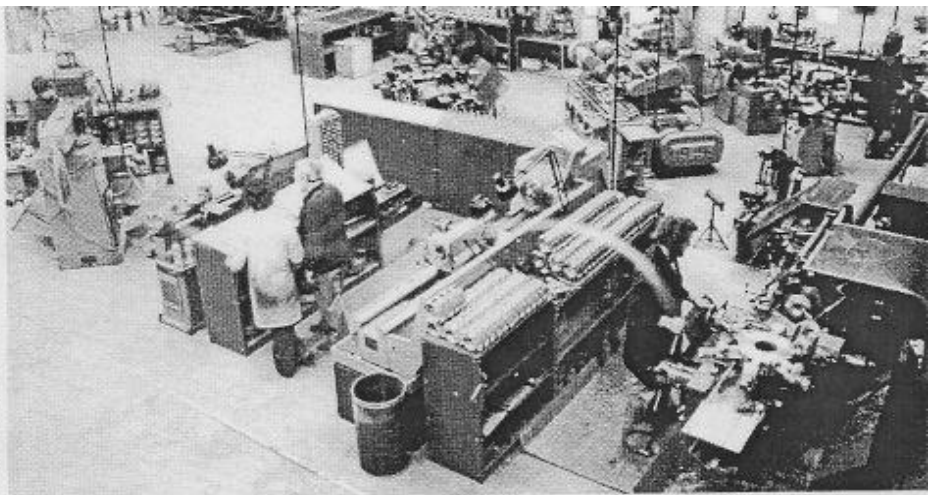
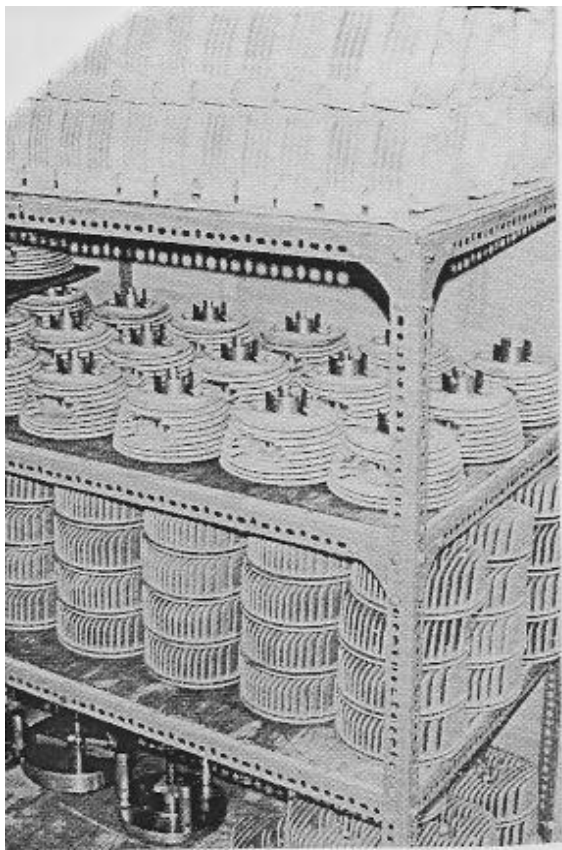
Talko were the first British importer of an Italian kart engine and such was their ability that the Komet outsold all the other makes long after other countries had moved to different brands. It is hard to imagine two more differing personalities and characters as those of Messrs Grana and Turney and it was a surprise that they ever managed to do business together. The Cockney could never understand why the Italian would do private deals with quick drivers and the pot finally boiled over when, having supplied Komets direct, the Italian refused to provide more Parillas to Talko. Finding that the rules of the game changed with the player, was more than Bernie could stomach and as he put down the phone of the Parilla refusal so he vowed to be done with the Anglo-Italian conflict and decided to make his own motor.

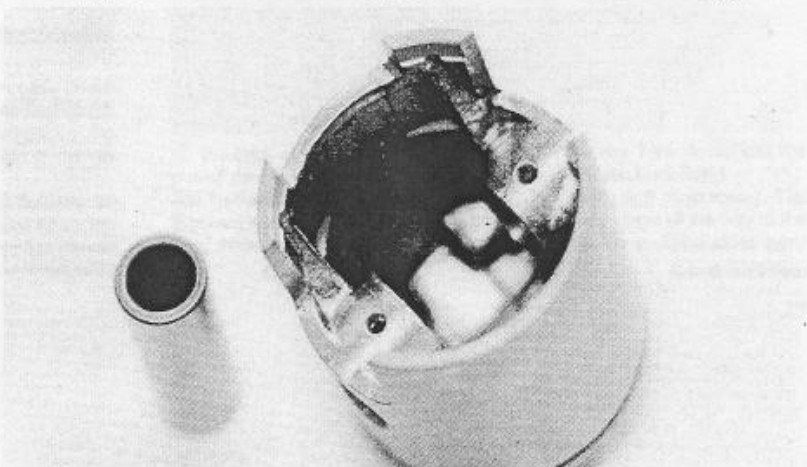
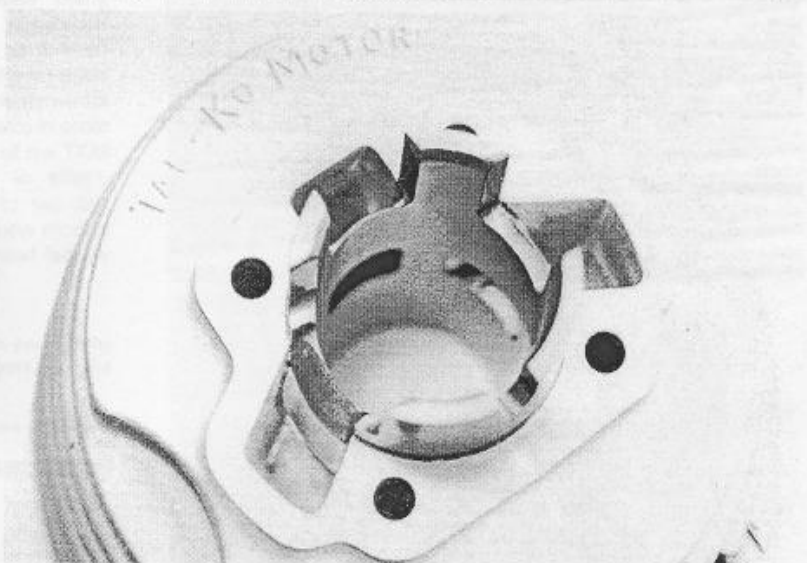
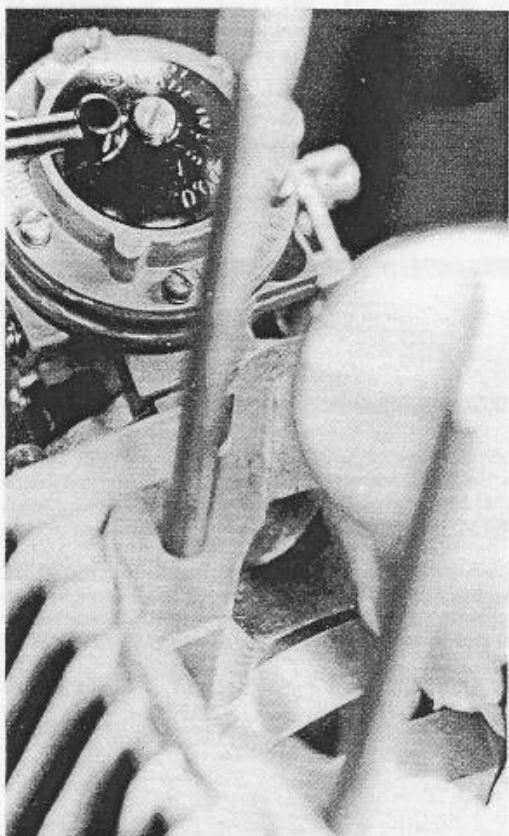
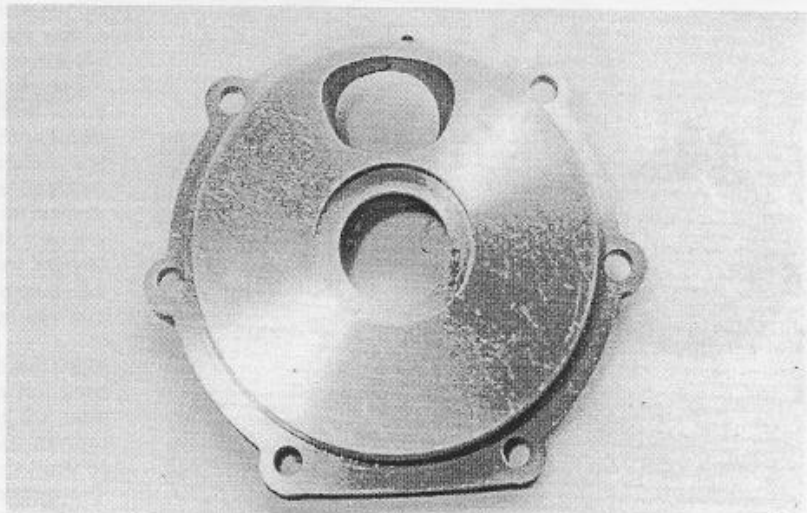
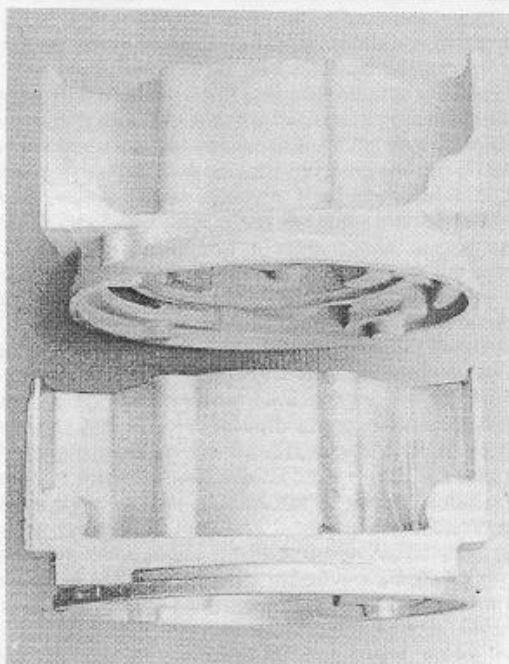
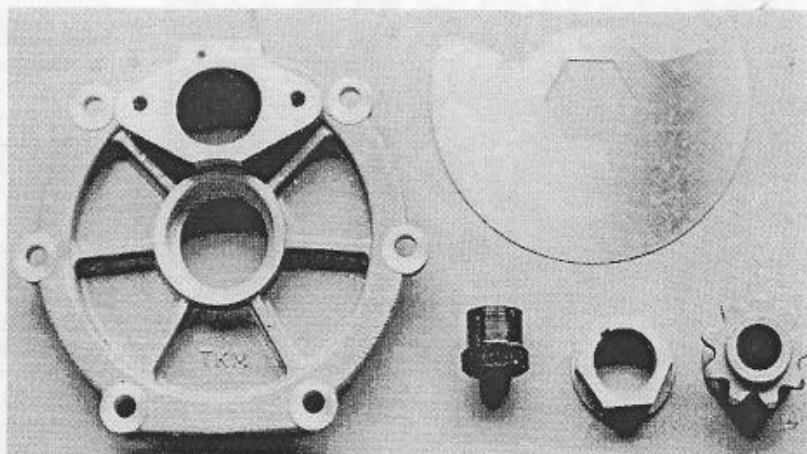
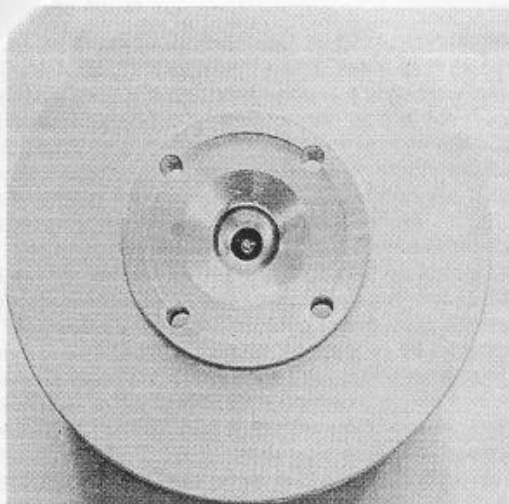
On many occasions in the past, engine manufacture had been considered with the closest being a small English run of the Komet K76 with twin rotary valves that was no longer in production in Italy but seemed to have potential. Like marriage, the longer you put it off so the harder it gets but at least you have accumulated more experience. The difficulties of making the TKM have been many times greater than was envisaged but there is no doubt that the finished product has benefited from the long gestation. One overriding principle has been adopted throughout the preparation of the dies, moulds and tooling and that is to ensure the closest possible accuracy of the finished product to the original design.

Quite deliberately, innovation has been avoided where it would mean breaking new ground. The basic layout is as the Parilla but with everything concentrated on achieving a superior dimensional accuracy. The bore and stroke are thus 48.2 x 53.8mm and many items are interchangeable because things like stud spacings are often the same. Each part has an alloy appropriate to the function but care is taken to ensure that it suits associated components for expansion rates etc.

The cylinder head has 18 vertical fins and a second horizontal fin that greatly adds to the cost of the dies: there is a conventional central plug with the usual combustion chamber and squish band and the final compression volume is about 8.8cc, somewhat higher than usually achievable on Italian motors. The barrel is sandwiched

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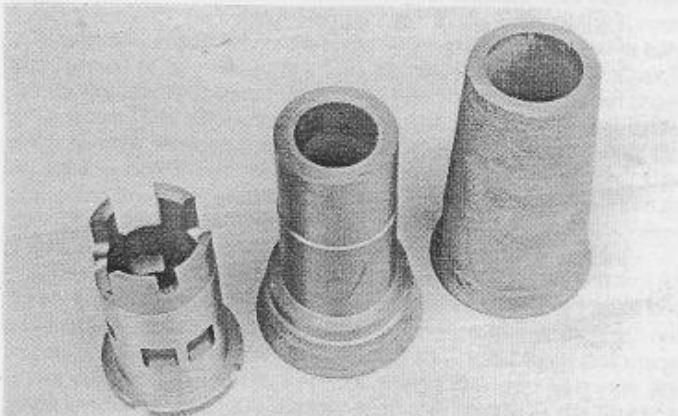
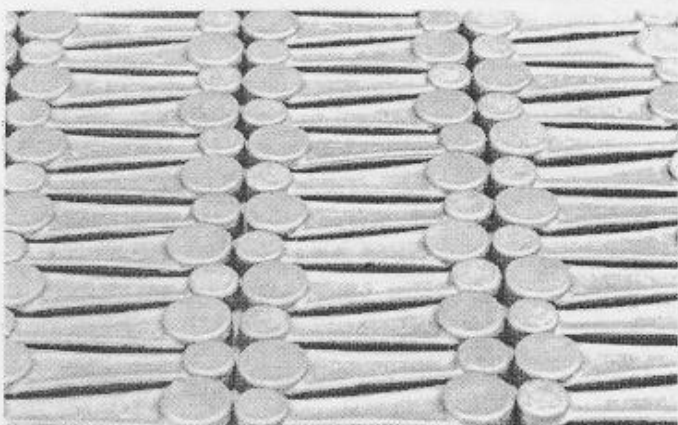
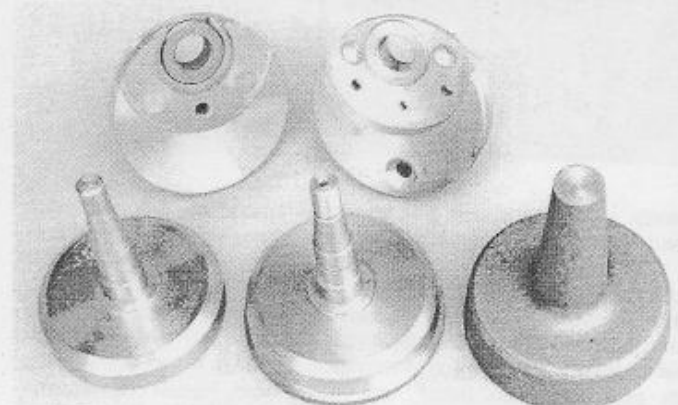
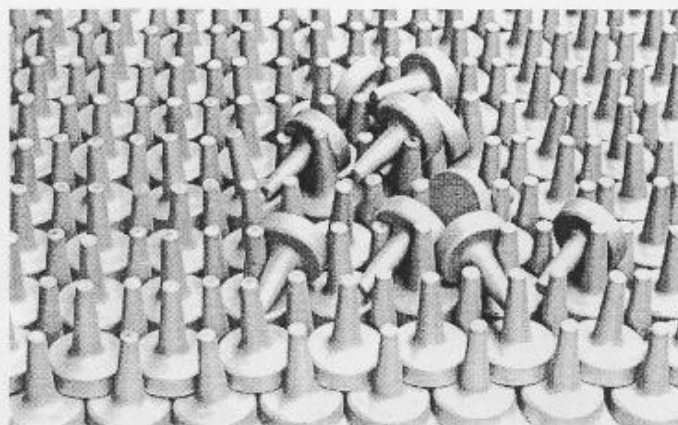
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between the head and crankcase by four long studs and has a liner of which Talko are extremely proud. This is spun cast and is ground on the outside with the ports being very accurately milled. This item is now being used as a race accessory as they have, or are about to introduce, versions for every conceivable other make. Blanks are to be produced for the man who wants to experiment as is a special soft version for the driver who will accept the benefit of rapid running-in for a life of just one or two meetings.

The inlet passage in the rotary valve cover inclines downwards by about 8°. The valve drive is of their own hexagonal design that by pure coincidence has also been adopted on the Parilla TT23. The TKM version is not made from hexagon bar but is instead machined from solid to enable an inner shoulder to be incorporated and to improve accuracy. The 0.5mm thick rotary valve can be safely cut away due to the smaller drive centre so that it does not mask the bottom of the inlet port when the valve is open. The inlet bore is 26mm and the cover is drilled as standard to operate a Tillotson carburettor. The TKM piston is proving a popular replacement for many makes of engine due to its strength and it comes with a special lightweight gudgeon pin. The plated rings are virtually unbreakable and when new can be twisted almost into a S shape.

The crankcase runs in SKF C3 main bearings and high speed Italian Rolf oil seals. Great care goes into the accuracy of the whole crankshaft assembly with the forgings, plastic crescent stuffers and hydraulically swaged copper rivets being ground to their final true shape. There are thus no gaps and a big end pin of special material links the two halves together. The big end bearing has a quality silver plated steel cage whilst the crank journals have key ways to suit Motoplatt electronic ignition. TKM engine sprockets are available in eight, nine and 10 tooth sizes with the former now very popular due to the new generation low-profile tyres.

One has to admire the way the Turney's have tackled this major undertaking in a series of digestible stages. They have not gone straight into production with a view to straightening up the mess later. Every component is backed by a pile of drawings through many stages of revision before it is deemed ready for tooling. Prototypes were produced and revised after yet more drawings with tests of materials and heat treatment etc. at every stage. Many items such as their pistons, liners, engine sprockets, crankshaft nuts, connecting rods, big end pins and bearings have been available over a period of time as quality replacement parts for other makes of motors. The early indications are that soon many motor manufacturers will have specialised components from Talko in order to get such high accuracy at competitive prices. Much of the TKM reminds us of the Sirio in that every motor is, in effect, "blueprinted" as delivered. The Talko ambition is to see this continue even with large volume production. Already new models are on the drawing board as are the plans for the second factory next door — My haven't you grown!



◀ The bottom of the crankcase illustration shows just one of the many alternative versions of parts produced as part of the development process.

BECCLES

March 24th was the opening meeting for the Beccles & District KC. It was a cold, wet and windy morning as high spirited karters gathered on Ellough Airfield. These conditions saw frantic tyre changes in the early stages but the weather did clear in the afternoon with the sun taking the bite out of the sea air.

210 National. These were the first out and it was a pity that the field was so small with only three starters for the first race. Tony Ayres romped home the winner when Roy Barber went off on the fourth lap, allowing Novice Steven Molesworth to take second place. For the remaining heats these three were

on the back of the 125 grid. So at the end of the day Tony Ayres was the overall winner with Roy Barber second. (Nice to see you back Roy.)

100 National. This class made some very interesting and close racing. The first heat saw Tony Campbell giving Lee Crane a hard chase all the way to the flag, with Lee finishing first, followed closely by Tony. Third place went

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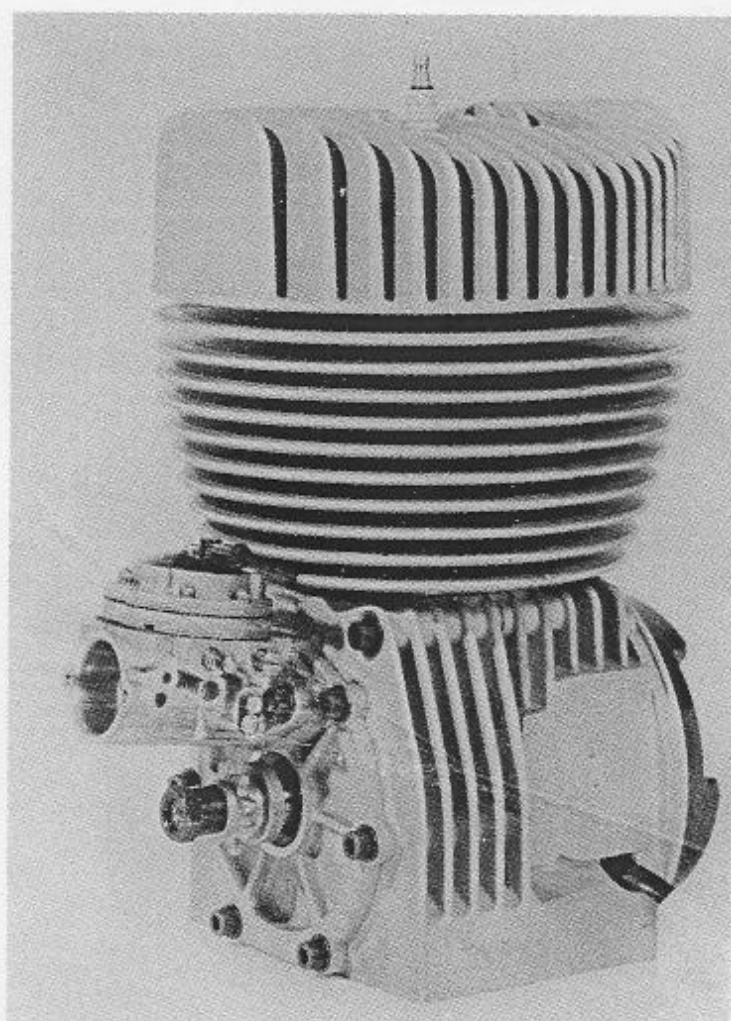
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