

TWO YEARS ago, at the sort of end-of-season Brands Hatch meeting where these things tend to go, I'd enjoyed a 'courtesy' outing on Anthony Ainslie's 250 Ducati. 'Take care', warned other Ducati buffs, 'that thing's got special cams and it's dead peaky - you'll have to really stir the box.' I didn't say so but, having just stepped off the *Classic Racer* project T20 Suzuki which hid practically the whole of it's powerband under one of the higher digits in the tacho, I thought I could cope. Six laps and only 36 gearchanges later, I knew I could, but I've ever since thought 'peaky' to be a pretty inconclusive expression, I'd also thought that once you'd learned to ride something *really* peaky, you'd never forget it. In that, at least, I was wrong.

Trotter's title topper

by Stewart 'Mac' McDiarmid

THE pit lane, Oulton Park. All fired up to take the Trotter Suzuki for a few laps. My first ride on a racing two stroke for 18 months. Scream the motor, ease out the clutch, hear the cacophony bouncing off the pit bays die to a strangled groan. The engine stalls and I peer down at the engine in the time-honoured racing gesture of 'what, me, guv?' 6000rpm didn't work so I try 7000. The engine, not masked by a gridful of barking four strokes, yaps painfully, but this time manages a few yards worth of revolutions before stalling. Try again. Be *really* brutal. Eventually we get out into the traffic where the breeze can dry the sweat of embarrassment.

Having become used to big, friendly four stroke power plants, I despaired of ever getting the hang of the Suzuki. Power comes in at around 7000rpm but isn't hugely convincing for a further 500 or so, and shouldn't be pursued beyond 10,000. (After which, I'd been warned, the rods and pistons tend to wave good-bye). Such a range is actually quite generous by racing two stroke standards but, coupled with a circuit knowledge which could only be described as rudimentary, invariably left me on the wrong line and in the wrong gear, reminiscent of those Ducati ads of a few years back. Even at 6500rpm, all a handful of throttle releases from the Suzuki is an adenoidal moan and next to nothing by way of acceleration.

Fortunately the knack soon returned to remind me why stokers offer excitement per cc of a quite different order from the more robust attractions of even the biggest four strokes. For a start it's the noise which, however unwelcome it

might be to some, carries a shrill, sharp edge of excitement as the motor comes onto the pipe. It's not a pretty sound, but it does mean business. Then there's the immediacy of the effect. All the engine's potential, however modest, letting rip in a single searing push which even the tacho has a job keeping track of in the lower gears. This capacity for acceleration - the stoker's huge torque (if you'll forgive correct use of the word) - is the reason they shine over the likes of Dukes and 'Macchis even on tight, 'handling' circuits.

(Torque: the agency that produces or tends to produce torsion. Literal translation from Longmans Modern English Dictionary).

Back in '67 when the TR250 first appeared, the Japanese equation was pretty crude: all outright power and forget handling and driveability. On multi-gear, multi-cylinder factory 250s, which were turning out almost as much sheer power as contemporary machines, the result was horrifying; production racers such as the Suzuki and TD1C Yamaha were comparatively gutless and could get away with flexy frames and the handling deficiencies which went with them. The TR, along with it's Yamaha rival, was the first of the Japanese production racers to hit these shores in any numbers. Like the YDS5-based Yamaha, the Suzuki was based on a road machine, the T20 'Super Six' (X6 in the States). The TR version began to arrive in the UK in May 1967, leaving precious little time for setting them up for their first major outing, the TT. Three were entered, carrying Rex Butcher, Chris Vincent and Barry Smith to predictably ignominious early retire-

ment with blown engines.

By the time of the '67 Manx Grand Prix the problem had been diagnosed: the compression ratio was miles too high. An extra 0.5mm thick head gasket and Wiseco piston with a lower crown proved to be the remedy, suggesting that the error was something approaching a complete ratio! This helped Frank Whiteway take a TR to second place in that year's lightweight race with a lap at over 90mph. In 1968 he went one better, winning the race in which Stan Woods set fastest lap on board the rival Yamaha. In 1969 Frank Perris took a Crooks TR250 to its best TT place, second, with a fastest lap at 95mph. The Suzuki raised a few eyebrows along the way by clocking no less than 129mph through the Highlander speed trap. Ultimately the watercooled TZ Yamahas came along, consigning the TRs to history until the Classic movement opened the book again.

Both the Yamaha and Suzuki were dogged by blow-ups in the early years, attracting a not altogether deserved reputation for unreliability which was at least in part due to inexperienced setting-up.

Not that the judgement should be too harsh: anyone who's ever raced a stoker will know how irresistible can be the impulse to go just a shade leaner in the quest for one more horsepower, which usually proves illusory anyway. Although always fewer in number the Suzukis seemed to have had the edge on reliability, attributed by many to its retaining

Right: McDiarmid aboard the Suzuki TR250 at Oulton Park. Over the track's tarmac seams, the bike felt edgy.

Shell Oils



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Posi-Force lubrication to the crank and mains, in addition to the simple petroil system of the Yamaha. (Interestingly, we threw away all the plumbing on the *Classic Racer* project bike yet still experienced no crank lubrication problems: a tribute, perhaps, to the benefits of better and more versatile oils than were available in the sixties).

The machine tested is that which took Les Trotter to last year's 250cc *Kennings/Classic Bike* Championship, the first Suzuki to clinch the title despite previous near misses. Les is no stranger to the marque having pushed Charlie Williams' TD1C into fourth place in the 1970 Lightweight MGP on board yet another Crooks TR. Its owner, Canadian enthusiast Kevin Fletcher, tempted Les out of retirement for the '84 Classic Manx only for a lack of spares to cause a disastrous and frustrating week. The following winter saw Les scouring the Crooks parts stock, ending up with a tolerably reliable device marred principally by the chronic pattering of its ancient Dunlop triangulars. Last winter saw a change to WM2 rims front and rear to accommodate modern rubber which, in Les' words, "transformed the handling."

Visually, the bike is standard unless you're eagle-eyed enough to spot the oversize front rim or 30mm Mikuni Concentrics which replace the worn-out original remote-float carburettors. The fairing is not original but a recent copy from old photographs. Internally the obsolete magneto has given way to a Femsa electronic set-up. Modified Suzuki GT250 pistons are used, principally because they're cheap, freely available and come with malleable iron rings which tolerate clouting the very wide exhaust port at something like 3500 feet a minute. The exhaust pipes are the standard TR250 units which first came with the machine, but with the addition of modern silencers at the behest of scrutineers everywhere but The Island: the noise "sounds bloody marvellous bouncing off the walls at Kirkmichael!"

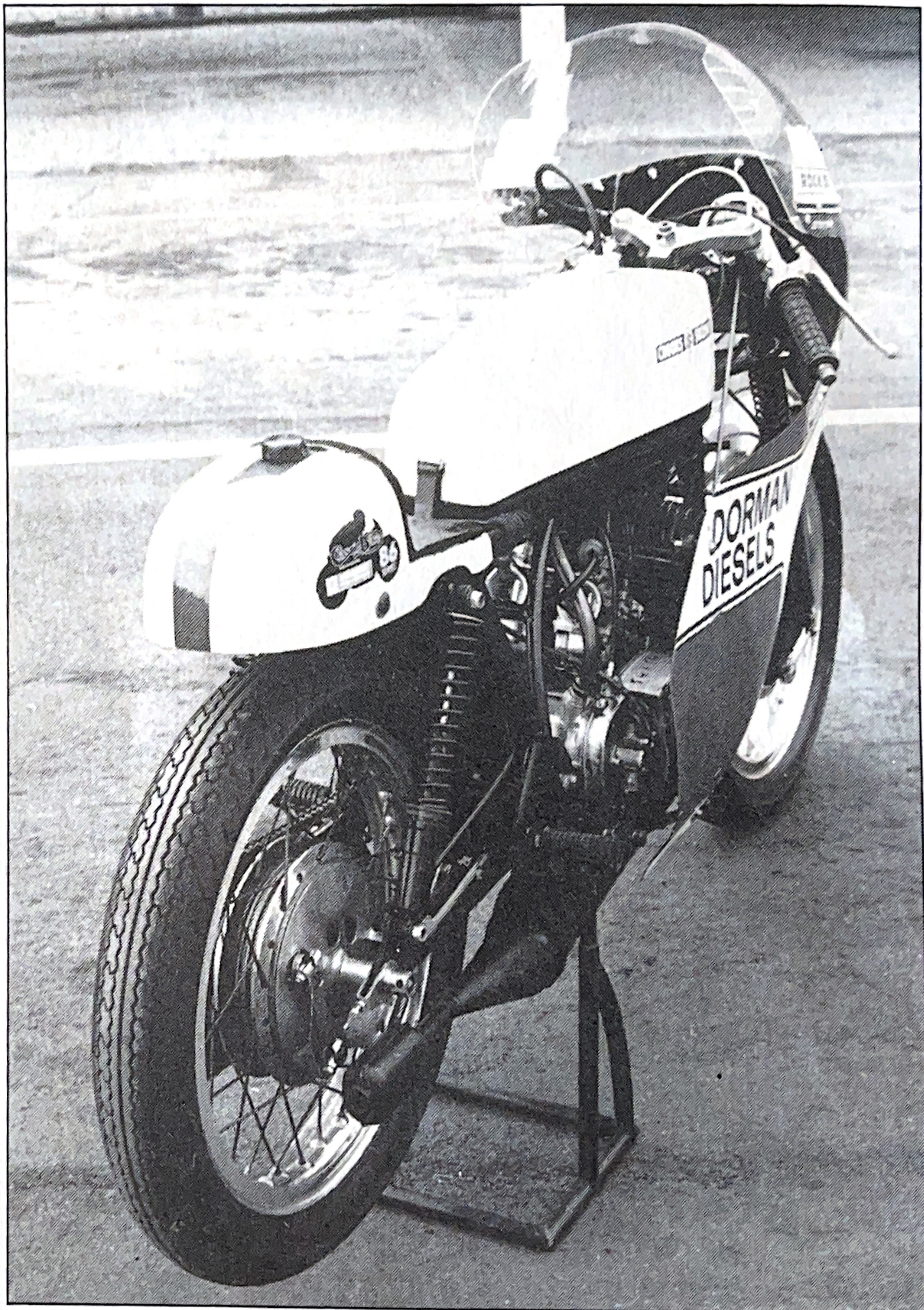
The TR departs comparatively little from the T20. In the chassis department a double-sided TLS front brake identical to that on the works RT67 water-cooled 125cc twin replaces the limp-wristed original; Ferodo put considerable enthusiasm into relining it with AM4 compound. The frame, initially a masterpiece of torsional flaccidity, came beefed-up around the wing-arm pivot with an additional tube which would have been more convincing had it been straight. Apart from differences to the timing-side flywheel to accept the racing ignition, and the ditching of heavy road components, that's about it.

In its initial form Suzuki claimed 35bhp

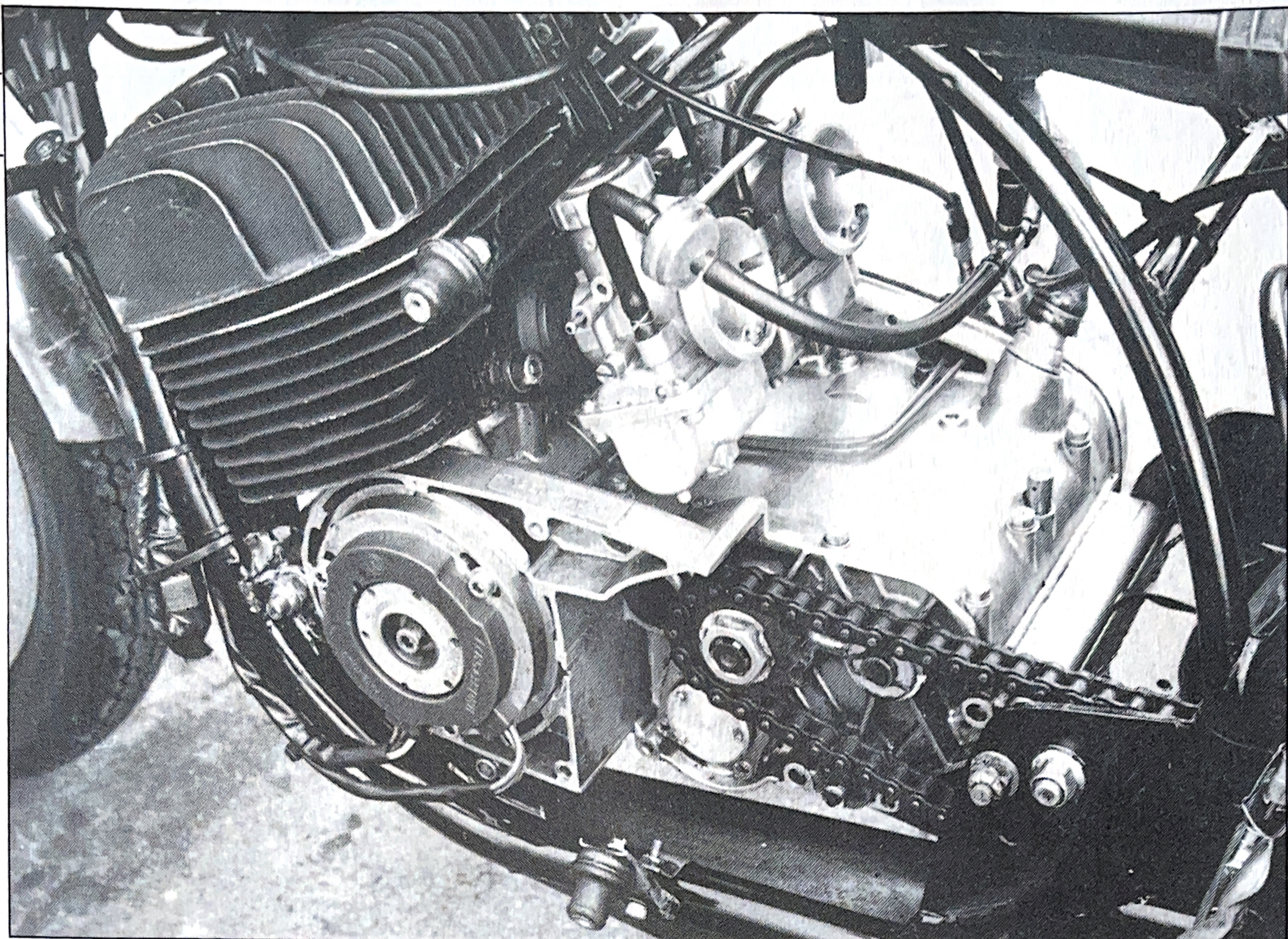
at 9000rpm from the TR. By 1970 output had risen to 41bhp which, incidentally, is the highest dyno figure recorded by Project T20. Regrettably, in that form the T20 suffered terminal meltdown after five minutes and had to be drastically detuned; the much larger fin area of the TR barrels and head spares the pukka machine a similar fate – usually. Internally the TR boasts much longer intake, transfer and exhaust timings, managing to get away with a significantly larger carb venturi than was usual on modified T20s during the sixties. The exhaust port is markedly 'T' shaped, once quite common but now rare as it tends to give pistons and rings a hard time. However

there's not much you can do about it. Les reckons the engine to be close to standard internally, although he suggests slightly more power than stock at somewhat higher rpm, so there are differences; quite what these are, he's not telling.

THE first thing to strike you on boarding the 250 is just how short, low and bloody uncomfortable it is. It starts easily only to reveal a noisy coarseness which would deter anyone but a racer from treating it harshly. Ear plugs help. If the technical focus of the TR is its engine, the same element is the centre of attention whilst riding. The



The Les Trotter Suzuki, winner of the 250cc Kennings/Classic Bike Championship last year. Fairing is not original but a perfect replica.



The 247cc motor has 54 x 54 bore and stroke and compression ratio of 7.8 to 1. Suzuki claimed 35bhp at 9000rpm for the bike.



Damaged piston after the Suzuki self-destructed during the test due to a faulty crankshaft. Rider Les Trotter was not displeased – better during a test than five days later in a race.

wrong gear is not merely irritating, it's competitive suicide: even in second gear the motor takes aeons to haul itself back into the powerband. Fortunately the Suzuki, with six speeds compared to the five of the TD1C tested on the same day, is much easier to manage once you've got its measure: you rarely find yourself having to improvise the right gear for a particular corner.

The other attraction of the TR is its power, or rather comparative lack of it: the chassis never gets wildly out of shape (although Gerrards might dispose it to) but forever gives the fractious feeling of trouble not being too far away.

The other side of the same coin is the responsiveness of such a light, short-wheelbase, steeply raked machine. Project T20 had an extra two inches welded into the swing-arm and it shows: at high speed the TR feels slightly edgier, particularly over tarmac seams, but is correspondingly more agile through the slower bits. Given sufficient talent and the faith to bully it and hang on, it will do your bidding. However I can imagine some riders in the sixties having been intimidated by its hair-trigger awkwardness as compared to the familiar predictability of more established tackle.

At Oulton, one of the trickier circuits in the country and correspondingly one that tested circuitcraft rather more than outright handling, the Suzuki shows its

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limitations only at a couple of places. Cascades, the second corner from the start, apart from having a very late entry, offers at its apex one of the finest set of ripples to be found anywhere. The short travel and stiction of the TR's suspension make heavy weather of these, pattering violently enough to blur the vision. The cautious rider is left with a choice between avoiding the apex altogether or getting on the power far later than he'd wish, by which time a more forgiving bike (or less prudent rider) would be off and gone.

The next corner, the hairpin, is awkward only because a gear somewhere between first and second would be better

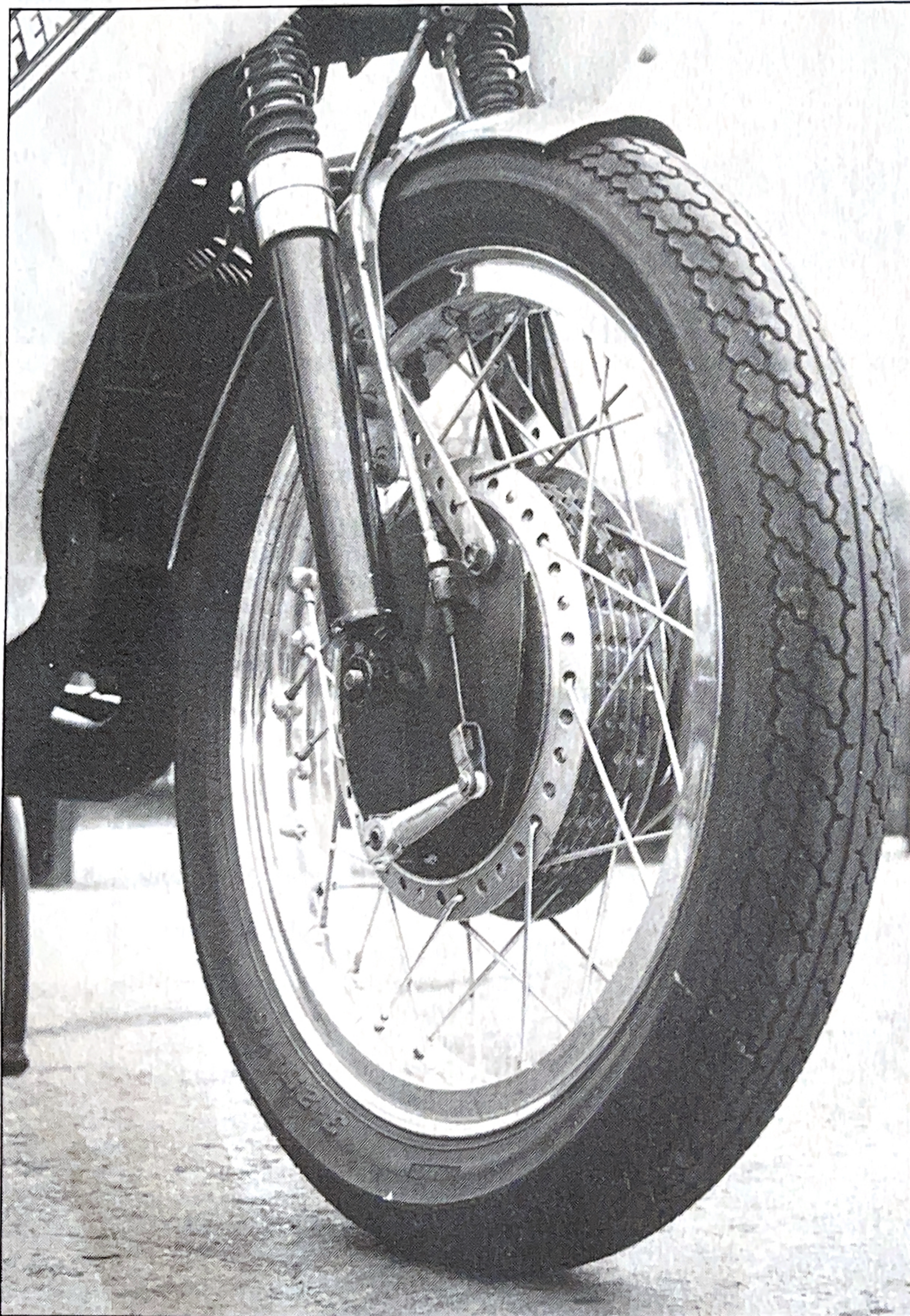
suited: for all those speeds the TR's box isn't particularly close-ratio. Approaching Knickerbrook you're cramming as much of yourself as will fit behind the screen, the engine close to peak revs in top. Down two (or was it three?), hard on the power early because the revs are marginal at around 7000 and the exit's uphill, and hang on tight over the changes in surface. The next bit, Clay Hill, is quite exciting enough even on a 250 Classic: an abrupt crest taken flat-out at an appreciable angle of lean. The front end gets light, shakes a little, then shakes some more as it lands on the imperfect surface. Thankfully there's plenty of spare road if things get out of shape, although on a

modern 250 you'd need every inch of it.

Thankfully, at these speeds everything's settled down before the brakes are hit for Druids, a corner where local riders always reckon to make up time. It's faster than it looks and, since the first of the double apexes is missed altogether, a good place to dive up the inside in a dice. After that it's the Bailey Bridge and on to Lodge with its adverse camber exit. Big bikes regularly spit people off here but there's no danger of the Suzukis doing that, except maybe in the wet. For the same reason Deer's Leap – so spectacular on a fast machine – is something of an anti-climax. By now you're back at the start and ready to do it all again, two stroke idiosyncracies permitting.

Had things worked out rather differently we had hoped to bring you comparative lap times of a TR250 and TD1C Yamaha taken on the same day. The Yamaha, you may already have read (*Classic Racer*, Autumn 1986), scuppered that by self-destructing part way through the season. However, we can offer at least one quantitative assessment: the Suzuki blew up a good five laps sooner. Les, far from being mortified, was glad it happened then rather than five days later at the Snetterton championship round which he went on to win. The problem was diagnosed as a faulty crank.

Clearly it pays to be philosophical where racing strokers are concerned.



Oversize WM2 rims front and rear allowed the use of modern tyres which has transformed the handling.

SPECIFICATIONS

Engine ..	two stroke parallel twin
Bore x stroke	54 x 54mm
Capacity	247cc
Compression ratio	7.8:1
	(with 1:1 avgas/petrol)
Carburation	2 x 30mm Mikuni
Ignition	Femsa Electronic
Output (estimated)	42bhp
	@ 10,000rpm
Clutch	Multiplate, wet
Gearbox	6 speed
Frame	Tubular steel
Suspension	
(front)	Telescopic
(rear)	Swinging arm/ twin shock
Brakes	
(front)	Double-sided 2LS
(rear)	Single-sided SLS
Wheels/tyres	
(front)	Dunlop KR124 300/325 x 18
(rear) ..	Dunlop KR124 350 x 18
Weight (dry)	248lb
Top speed (estimated) ..	129mph
Year	1967
Owner ...	Kevin Fletcher, Canada

