

WHAT prompted Suzuki to name their successful 500 racer after a Greek letter is not one of biking's best-known facts.*

But having associated the word 'gamma' with one of the fastest machines ever built, it does make (marketing) sense to use the same name for the ultra-sporty 250 road bike.

There is a curious kind of logic behind it. The Greeks gave us philosophy and the main attraction of the RG250 is not its pretty styling, radical use of materials or its snappy performance; it is the entire philosophy which created the Gamma.

Literally meaning a love of truth, philosophy applies to bikes in the broad sense that when something *is* right, it soon starts to look right. I recall how the CX500 looked a whole lot better *after* we had ridden it . . .

It is in the nature of things that cause and effect get transposed, leading to the belief that when things *look* right it means that they *are* right — a policy which can easily lead to stagnation.

Looks are all-important to the Japanese and styling takes top priority on their machines, although they are very conservative. Even their "custom" and LTD models are watered-down compromises of the real thing, but of late they have followed a different tack, styling road bikes after their racing machines.

Racers are built purely for function; for minimum size and for maximum power. They are a good illustration of the idea that when a design is right it also looks right. A roadster which is a superficial copy of a racer isn't necessarily a good bike. By copying the style the designer might be guilty of making the bike look right in the hope that this will also make it work right. A mindless, blind copy will not lead to future improvements.

If, on the other hand, it encourages the designer to adopt the reasoning which creates racers, then it will probably lead to a steady series of improvements. "Race breeding" has been a useful tool for the engineer, and more so for the publicity people, at least since the 1920s.

The Japanese tended to take individual parts used on racers and apply them in a suitable form to their road bikes. Thus we can trace the history of disc brakes, cast wheels, tubeless tyres, anti-dive forks, rising rate suspension, four-valve heads, two-stroke boost ports, reed valves and so on.

Often these parts would be so watered down as to serve no useful purpose — except styling. Recently, in the struggle for more performance — not to mention more customers — the cosmetics have been dropped and the parts have been used as originally intended.

The latest crop of sports bikes have gone a stage further; instead of using race-developed parts in isolation, they have integrated them into a whole machine. It started with the CB1100R; race styling was begin-

RG250 **Γ**

THE WORD FOR IT IS GREEK.



well-silenced (with the obligatory alloy strip around an otherwise steel can). Along with the porting, the pipes give a swift power surge between 6000 and 7000, flattening off to a fairly broad spread of power at the top end.

It's a bit peakier than most road-going two-strokes, but it's generally flexible enough not to be nuisance. You need to shift the gears a lot for sudden overtaking power and the only other time the engine characteristics are noticeable is top-gear cruising in the inefficient, 6000rpm region.

It doesn't like holding speed here, and the slightest extra load slows the bike immediately. It is unfortunate that this is also where the bike is geared for open-road speed limits: cruising is much happier either 10mph below or 10mph above this level.

The engine looks like a liquid-cooled development of the X7 (in fact Badger's tuned X7 gave almost the same power as the RG). Apart from the water jacket, the most obvious differences are the exhausts and the 28mm flat slide carbs — 2mm bigger than these on the aircooled motor.

While the power unit is good enough, there's nothing special about it; on this bike the focal point is the

frame, boldly contrasting with the black power plant it shines out in anodised alloy.

Suzuki GB weren't too certain about the actual material, they thought it might be HE30 — aluminium alloyed with dashes of magnesium, silicon and manganese. It is a medium strength alloy with good welding properties. While it is a lot lighter than steel it is also weaker so, to achieve the necessary strength there isn't any vast saving in weight (the RG's dry weight at 288lb is 6lb more than the X7, although this was admittedly one of the lighter lightweights. The LC weighs 306lb).

The choice of a light alloy frame is a bit of a puzzle. Styling isn't a complete answer because they could have achieved the same effect with steel. There is always the connotation of the real racing background, but this must be offset to some extent by customer resistance to what is largely an unknown quantity.

Alloys don't exhibit the same endurance limit as steel; fatigue weakens them seriously. Certainly it should not cause concern for the first owner, but a prospective buyer of a used bike will obviously have doubts — what do Suzuki consider to be an adequate "life" of a frame? Has the frame been clouted or dealt some other mischief? Even if the doubts are unfounded, they are still likely to affect the bike's resale prospects.

Suzuki could easily get round the problem. They could engineer the frame to have a life of well over 10 years; they could make it a redundant structure, so that if any one member broke, the overall strength would not be affected; they could build in a deliberate weak spot which would not have serious

ning to come with race performance.

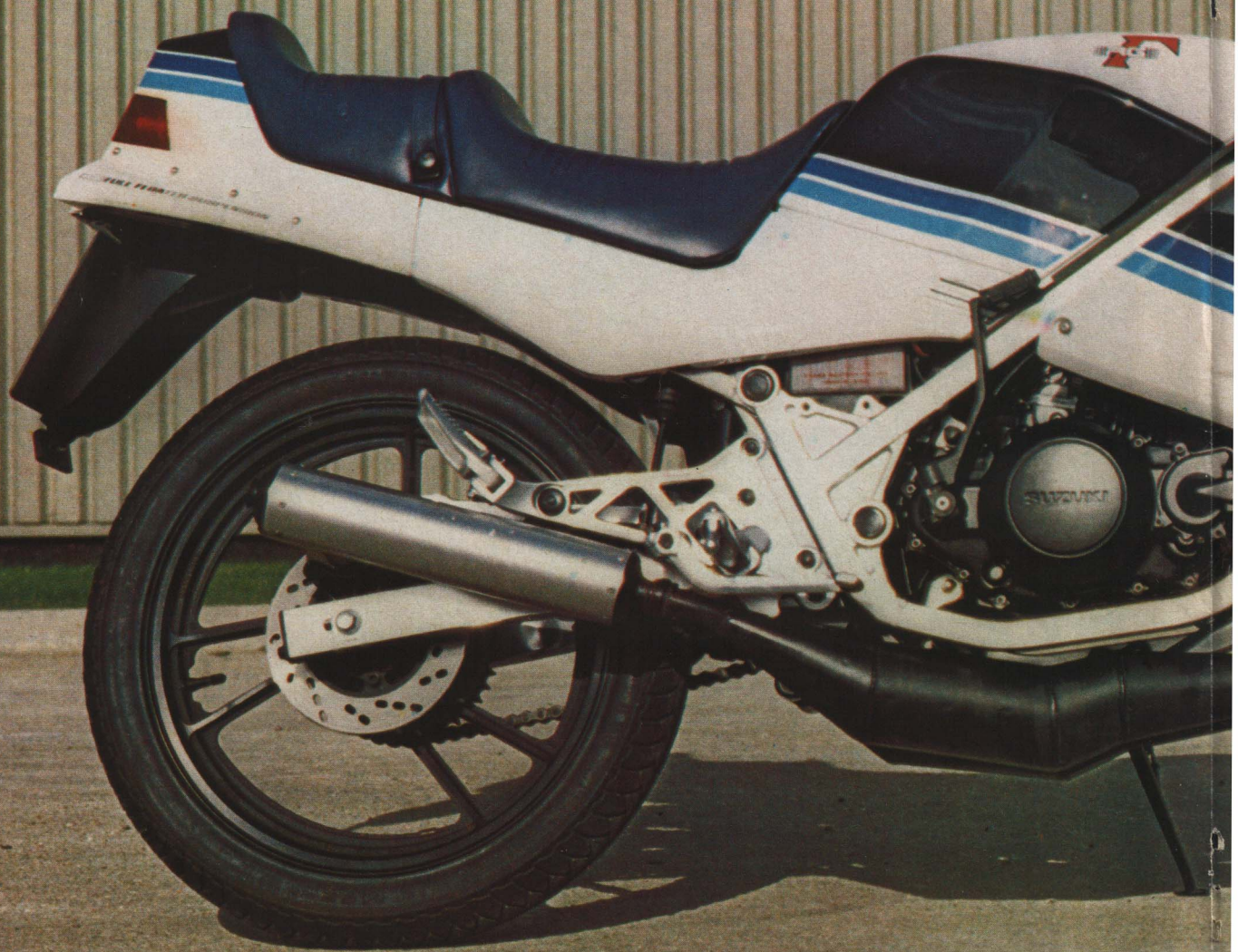
The RG250 is the most recent machine in this mode, following its race track counterpart faithfully, even down to materials — but not in engine size.

The beauty of it is that new engineering automatically brings new styling opportunities — which Suzuki haven't been shy to exploit — while new styling does not necessarily bring any advances in engineering. The major question is, does it represent the start of a new generation of high-performance machines? Or, is it a last-ditch attempt to inject some action into a jading market, to rekindle the new-model-a-year spirit and get straight to the wallets of the *Gorreravwun* clan?

Whatever the motive, the RG is more than a mere styling exercise. Its component parts have the look and the feel of things which are well made. Leon Moss, who rarely rises above the level of scathing on such matters, was moved to mutter that it "oozed quality". Suzuki have developed a riding position, steering feel and suspension which makes the RD250LC seem old-fashioned.

A closer look at the RG reveals some of the thinking that has gone into it. The engine is state-of-the-art, two-stroke twin. It runs the time-honoured 54 x 54 bores and gives a healthy, but not remarkable, 32bhp (that's *brake*, not brochure horse-power). The liquid-cooling keeps well on top of the output, resulting in consistent, fade-free power without the ring-ding rattliness which used to send potential two-stroke customers scuttling after the nearest four-stroke.

The exhaust pipes, chopped and welded into sections which look purposeful, are





consequences if it broke and would serve warning of the general state of affairs. They could do this whichever way suited them, but it seems like a lot of trouble for no particular benefit.

However, they have succeeded in making it look right and its job, of holding everything together in a way which provides good roadholding, is an equal success. There is a lot crammed into the open spaces between the wide spans of the frame rails, much of it in a way which allows easy access. The frame provides a convenient resting place for things like the radiator, coils, battery and electrics — service items which are all within easy reach.

All you have to do is unclip the side panels of the fairing and remove the tank — except that they have fitted the tank in a curious way. It has two fuel lines leading to a remote tap which bolts to the frame; the lines pass on either side of one frame member, making it very difficult to remove the tank without getting wet.

They have also bolted the oil tank to the underside of the fuel tank. This has to be undone while supporting the fuel tank with all wires and hoses at maximum stretch. Having passed this obstacle course, the rest appears to get easier.

Despite the tank problems, the idea is good. The fairing goes practically straight on to the frame and all of the ancillary parts are slotted into the most compact package. The fairing quite obviously works from an aerodynamic point of view, and this is also one of those rare occasions when the manufacturer has made full use of its potential. Everything — lights, indicators, mirrors and instruments — that would normally be carried on the front forks, is carried by the frame-mounted fairing.

Only the controls and switches remain on the handlebars, giving the steering the best possible chance of stability with fast responses. If other manufacturers were bothered enough about the steering to want to use 16 inch wheels, you might well ask why they haven't first removed all of this inertia from the steering's moveable components.

And, of course, the RG has a 16-inch wheel. Fortunately, the reality fits the theory very nicely because the steering is as sharp as you could want, with fast, precise responses and yet no hint of instability. Suzuki quote a figure of just over 65 degrees of castor — we're not sure if this is a misprint, although the steering feels as if it could be that steep and maybe by taking all that weight off the front forks they could just about get away with it.

The thing is that it works, and the handling is nicely complemented by the Michelin A55 (front) and M55 tyres, both in 100/90 section. When these tyres are worked hard enough to get hot they get much stickier than most road rubber; the result is a very positive grip of the road, with feedback and a reassuring firmness which isn't usually associated with small bikes.

It wasn't until we got to Snetterton's wide-open curves that the tyres' limits became apparent. Manufacturers and tyre companies in particular always seem to be very conservative about tyre sizing; they probably put as much emphasis on cost, weight, wear and stability as on sheer grip, whereas we're inclined to put a slight bias on these properties. What I'm getting round to is that the RG seems like it could use a bit more back tyre.

The M55's pattern finishes with a narrow, raised shoulder; once the bike gets over on ►

to this, the feel deteriorates. It is not unlike the difference between the feel transmitted by a wet road compared to a dry one — and it is equally disconcerting when it happens halfway through a corner.

The grip diminishes as well; if the bike is heeled over further or if more power is put on, the rear wheel gently slides away. The fact that it is breaking loose long before it ought to lose grip is shown in the steady, progressive way it does it. Personally, I'd prefer something which held on longer.

At the track it seemed to reach this edge all too easily, on the road it was much less of a problem. Road or track, the suspension matched the bike perfectly, another factor which contributes to its ease of handling. It also gives a remarkable level of ride comfort and this was perhaps the RG's quality which impressed me most.

It isn't easy to put "good" suspension on a light bike and it is difficult to match suspension to the needs of a short wheelbase plus braking and acceleration which are both fierce and sudden.

Somehow they've managed, the Full Floater tail does just that, while the front is deceptively soft, giving a lot of travel without letting the rider know too much about it. The only time it was noticeable was after dark, when dipped beam would shrink back up to the front wheel whenever the brakes were used hard.

The RG has a very stiff anti-dive damping — another feature which appears to work, unlike the cosmetic efforts used on other roadster machines. The anti-dive doesn't stop the forks compressing — it merely slows down the rate at which they compress and avoids pitching the rider up into the handstand mode.

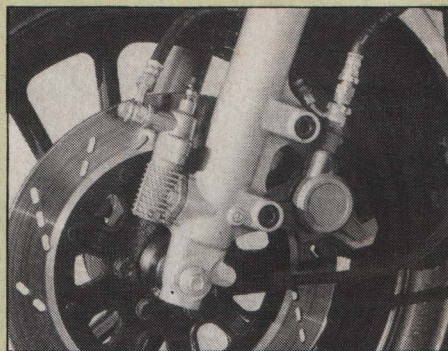
The result of blending the frame, tyres and suspension is a remarkable level of ride comfort and handling, set off nicely by a good riding position. This is another example of function before appearance — the one consistent criticism offered by onlookers and riders alike was that the handlebars "look funny". They could be styled and positioned in many other ways — but where they are, they work. And they look funny.

The finish around the bars and top yoke sets off the idea of a high level of trim. Gloss black enamel, or something like it, both blends and contrasts with the flat, dark finish inside the fairing. The three instruments (a temp. gauge is fitted) are set into a racer-type rubber mounts on a flat console.

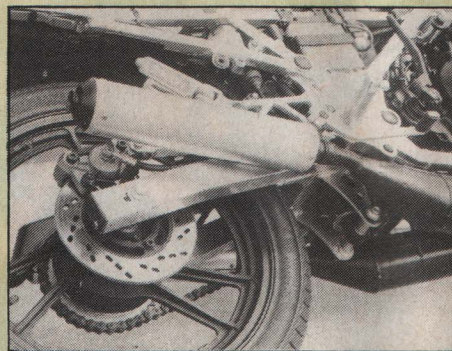
This is the first indication that two-stroke twins can, in fact, vibrate quite a lot. The motor itself is liberally rubber mounted and the only rigid point of contact noticeable to the rider is through the gearshift. There are other points which suffered — but not in silence! Both exhaust headers unwound their clamps and the new bolts needed re-tightening a couple more times during the test. The left plug lead was routed so that it wasn't as slack as it could be — and the engine moved enough to pull the plug out from under the cap!

There were a couple of other flaws which let down an otherwise excellent design. First, with the bulbous exhausts tucked well under the engine (giving more ground clearance than the tyres knew how to use) there wasn't room for a centre stand. The sidestand was perfectly OK for normal use but for maintenance work, Suzuki should at least have provided some lugs, etc., for a paddock stand and preferably included a separate stand, like Honda did with the CB1100R.

The other grumbles concern the tank. As well as its odd method of mounting, it



Soft front forks carry very stiff anti-dive damping.



The Full Floater tail floated with immense success.

