

# Cycle

DECEMBER 1985 ■ \$1.50



## New Bike Issue



Yamaha YX600 Radian

**Blitz Of '86!  
New Strokes  
For The USA**



Harley FXSTC

**Suzuki RG500**  
**Stroke Of Genius**  
**Not Here, Not Now**



**Comparo: Sporting Rubber**



# SUZUKI RG500 GAMMA

*Dear Sir—In order to explain your outrageous street behavior, the State of California commands your person to appear before the Honorable J. Armstrong Keytoss, Judge of Traffic Court for. . . .*



□ "You see, judge, this motorcycle is, well, enchanted. Sounds crazy, but this Gamma is an ETM, an Extra Terrestrial Machina, an alien blue-and-white ray, darting, ricocheting, beaming from place to place in the Slumbering Land of Fifty-Five. Sir, one really has to wonder whether a rider uses the 500 Gamma to open difficult roads with surgical precision—or whether the Gamma mysteriously, magically, uses the rider as a witless tool to play its own amusing road games.

"What's that, your Honor? I've been reading too many Stephen King thrillers wherein runaway lawnmowers corner and massacre unsuspecting suburbanites? What are you trying to get at? And who does this King fellow ride for anyway?"

Irresistible. The Gamma is irresistible. Standard equipment should include rider Rites of Absolution for acts soon to follow. *The rider named herein cannot be held responsible*

*for acts committed as an accessory to Gamma #8G2103. . . .*

Raw numbers first indicate the Gamma's spell-binding qualities. With its reservoirs for gas, oil, coolant and adrenaline all topped off, the RG weighs 406 pounds. On the Kerker dyno, running rich enough to own stock in Exxon and stumbling so erratically at 7000 rpm that no figures could be taken, the Gamma nonetheless produced 71.6 raw horsepower at 9500 rpm. Though 72 is far below the manufacturer's claim of 95, an ounce of common sense tells an observer that the Kerker dyno might easily have shown another eight to ten horsepower had the Gamma's jetting been spot-on.

This month's Canadian Gamma makes the Japanese-spec RG we sampled for the October issue feel like a wind-up toy with an iron-poor spring. Given a "modest" 72 rear-wheel horsepower from 30.5 cubic inches, the 500cc

Gamma has a horsepower-to-weight ratio in league with the strongest one-liter Superbikes in the world: they all lie in the 5.6–5.7 lbs./hp range, save the earth-rippling Yamaha V-Max at 5.2 lbs./hp. Clean up the Gamma's jetting and it would likely be into and through V-Max territory quicker than you could say "still too rich."

Lightness sharpens the edge of the Gamma's horsepower. V-Max power is a bludgeon with a velvet cover that wallops you forward with unending force. Gamma power is different; it has the quality of an arrow shot from God's own crossbow—instant and direct.

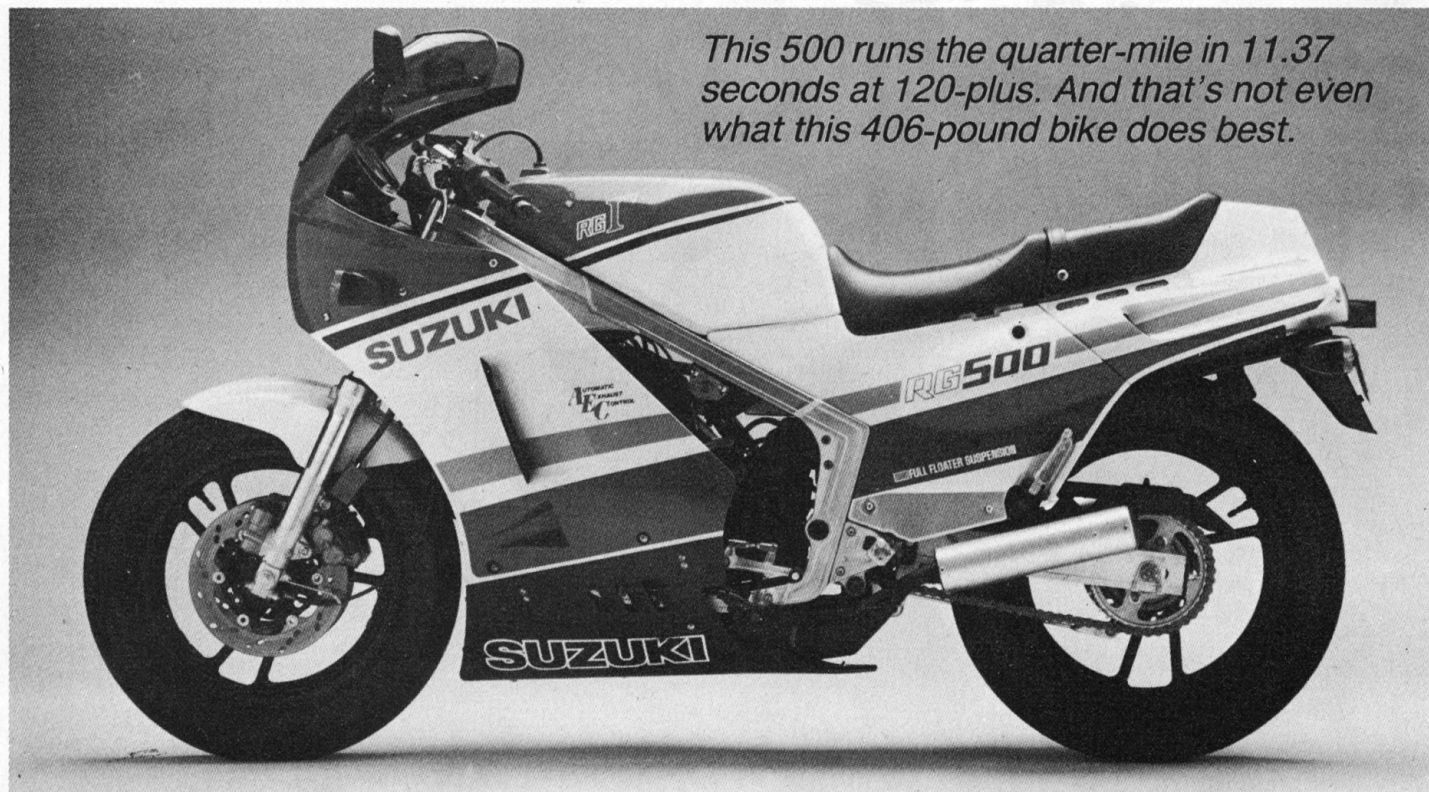
Run the RG past 7000 rpm and the space ahead collapses around your helmet; *here* does something more than become *there*; *here is there*. Everything the Gamma does, it does quickly. The Gamma's geometry tucks the front end back more severely than any production street motorcycle in our collective experience. The head angle is 25 degrees, 10

minutes; trail, a steady 4.4 inches. The squat front end rolls on a 16-inch wheel, and the wheelbase measures 56 inches. So faithful is the Gamma to the rider's body language that, should he roll his eyes upward, the RG, he might expect, would lift off and fly. Maybe the only thing the Gamma doesn't do is respond directly to brain waves.

Park the Gamma after that first brief ride—which is nothing less than an invitation to criminal activity—and you'll marvel at how close conceptually this street-going Suzuki is to an RG real racer. RG hallmarks abound: an aluminum-alloy (aluminum, magnesium, zinc) frame and a two-stroke square-four engine, with upstairs/downstairs banks and basement gearbox, rotary-valve induction and power-valve-and-chamber exhausts. The street-Gamma shares almost every conceivable piece of sport-spec hardware with a half-dozen or so other supreme road-blasters inside and outside the Suzuki range. Still, the Gamma is a racer-replica in con-

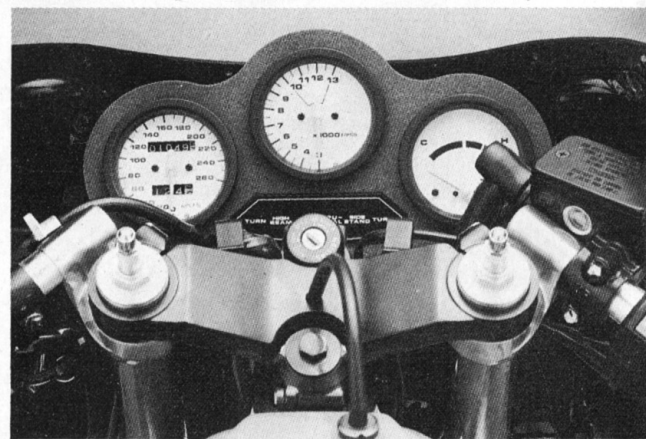
PHOTOGRAPHY: RICH COX





*This 500 runs the quarter-mile in 11.37 seconds at 120-plus. And that's not even what this 406-pound bike does best.*

PHOTOGRAPHY: SCOTT DAROUGH



*(Above) Instrument faces are classic black-on-white; bars non-adjustable. (Right) Rear pipes exit under rider; air slots help cool plumbing.*



## SUZUKI RG500

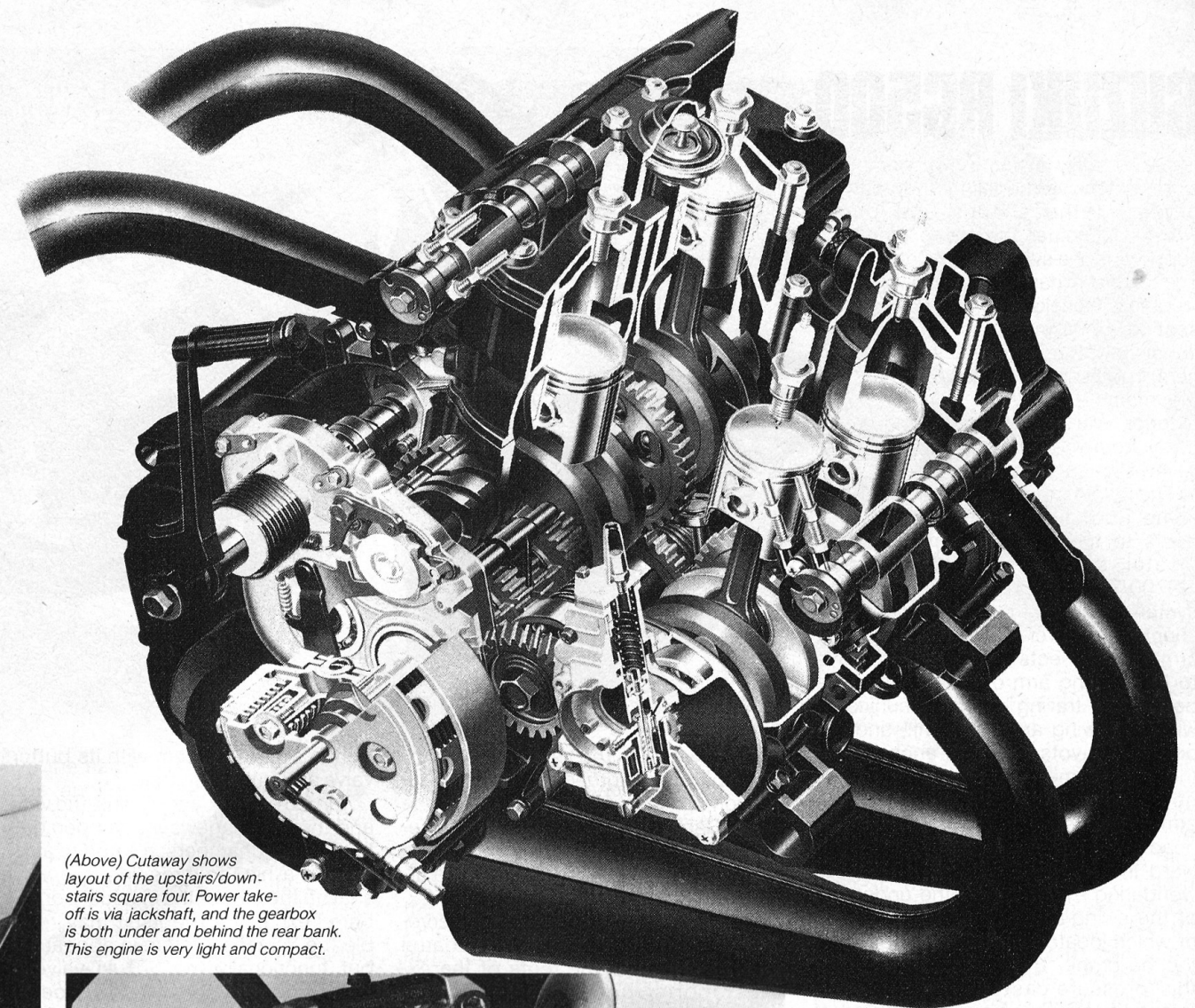
cept only; to understand that all you need to do is look at a pure racing RG500, which, sized like a 250, makes 120-130 horsepower, and has a power-to-weight ratio of about two to one.

Good ideas can stick well anywhere—street or track. The square-four comprises two parallel twins, one behind the other. The rear set rises about a half-story higher than the front set, and the entire engine case and cylinders tilt forward. Centerline gears, driven by each parallel set of cylinders mesh with a common drive gear on the interior end of a jackshaft that, in turn, gears to the clutch on the right side of the engine. The transmission, a racing-style side-loading unit, is located partially below and behind the engine. Rotary-valve induction requires outboard

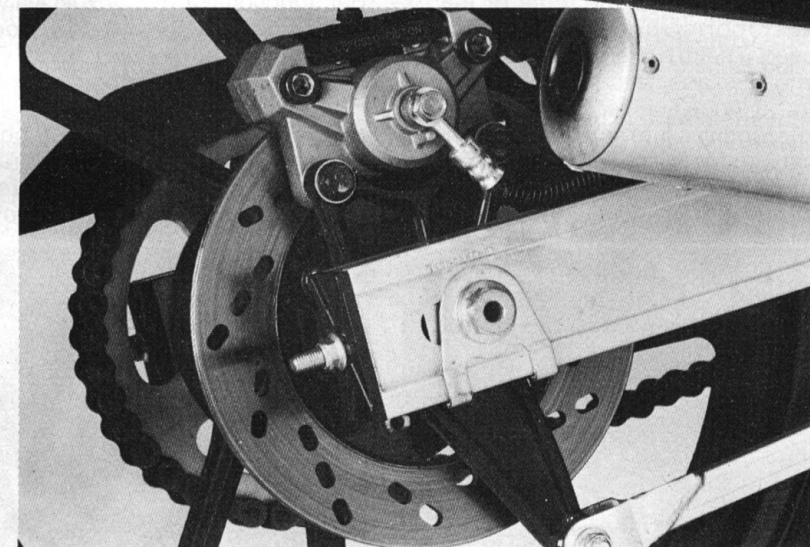
carburetors but is generally a good thing for high power output. Water-cooling makes possible a compact square-four, enabling the cylinders to group tightly together, with the rear cylinder exhausts running straight back. The result is an incredibly dense engine, with much of its weight slung low; the unit can push far forward, locating this mass very close behind the front wheel. As a rule, four-stroke engines don't readily lend themselves to compactness the way square-four two-strokes do. Four-stroke Vees are narrow, but long and/or high; four-stroke inlines can be narrow, but short engines have high, heavy cylinder heads, and lay-down inlines must fight length.

By no accident did two-stroke four-cylinder 500s come to dominate grand prix racing. Despite tremendous strides in four-stroke technology, two-stroke engines simply make more power with less weight for a given displacement. In the racing arena, current 500 GP bikes make more than one-horsepower per pound of engine weight. For supersport street machinery, the Suzuki RG500 and the four-stroke GSX-R750 are as nearly comparable low-mass machines as are currently available on the world market. According to factory figures, the 750 makes about 10 more horsepower than an RG500 but the GSX-R weighs significantly more than the Gamma—some 50 pounds. The

CYCLE



*(Above) Cutaway shows layout of the upstairs/downstairs square four. Power take-off is via jackshaft, and the gearbox is both under and behind the rear bank. This engine is very light and compact.*



*(Right) Anyone can build a rear disc brake; great ones are difficult. The Gamma's rear stopper is great. The tiny 210mm disc is light; the small caliper has two live pucks; feel and pressure are perfect.*

four-stroke needs about an extra 250 cubic centimeters and thus an additional 10 horsepower to match the power to weight ratio of the two-stroke Gamma. Obviously, a 500cc or even a 600cc four-stroke can't touch the Gamma. The GPz600 Ninja makes about 10 horsepower less and carries an additional 70 pounds.

Suzuki engineering has exploited the two-stroke's advantages in the

Gamma, bringing street reality into synch with theory. Other high-performance two-stroke roadsters are light, but not necessarily feathery: Yamaha's alloy-framed RZV500R weighs 447.5 pounds; the RZ350, loaded with catalytic mufflers, 381 pounds; Honda's impressive little three-cylinder NS400, 415.5 pounds. Since none of these kick-start two-strokes have to haul around electric starters or big batteries they all

can nick off even more weight compared to the four-stroke competition. But even in the two-stroke world, the Gamma is a featherweight, and that advantage must have come the old-fashioned way—the hard-won diet.

It's tempting to explain the Gamma's lightness as a function of its aluminum alloy frame. What a piece of work. The entire steering head is a pressure casting, as are the rear-section members supporting the swing-arm pivots. The use of strong, lightweight pressure castings both pleased the calorie-counters and simplified, we imagine, the production of the frames, by eliminating a lot of hand fabrication. (Robots weld the current frames together.) The massive steering head doubles as the cavity for the air-cleaner box, and this use of multi-duty parts is characteristic of the RG500 Gamma. One intricate piece serves where two might have been fitted.

Suzuki engineers point out that this



# SUZUKI RG500

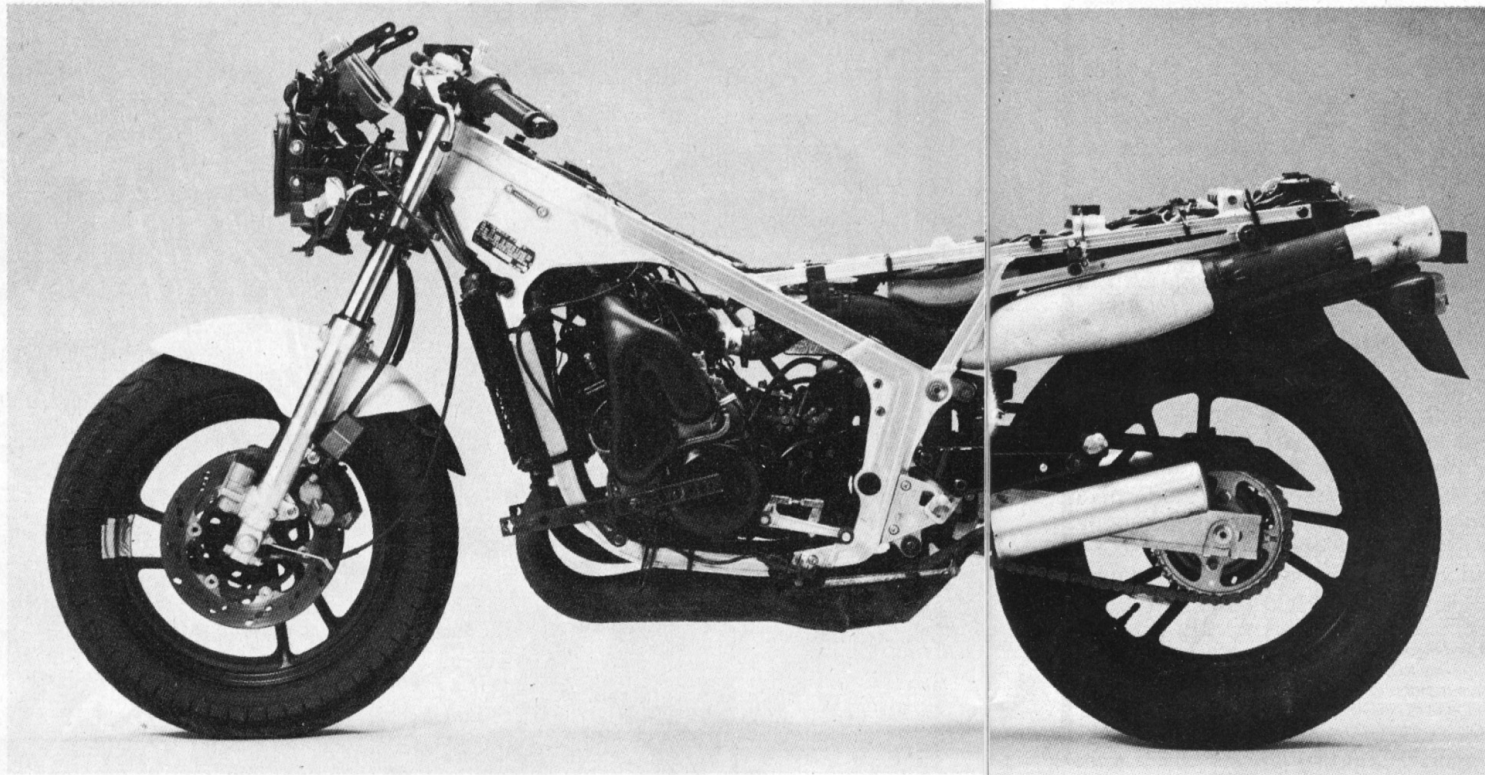
frame is really a triumph of computer work; extensive modeling and analysis produced the shapes and pared weight. Consider the frame members supporting the swing-arm pivot pin. The interior walls have extensive, delicate webbing. Consider, too, the basic box-section frame members. In cross-sectional view, the boxes have ribbed corners, in order to increase the strength of the member. Or, seen differently, the exterior walls of the box members, away from the corners, have been relieved slightly.

The alloy swing arm, showing the same ribbed-box construction, connects to the Gamma frame in a Full-Floater system similar to current GS700/750-series motorcycles. This system attaches the bottom eye of the shock to a lower bridge on the swing arm and connects the shock's top eye to the leading arm of a bellcrank. The bellcrank's trailing arm communicates with the swing arm via a link, and the bellcrank pivots on a pin anchored to the main frame. The linkage system is gorgeously sculpted—links, rocker arm, lower shock mount. Poke your head under the Gamma and peer upward in front of the rear wheel: your wondering eyes will see the underside of the swing-arm cross-brace, the top of which locates the connecting link to the bellcrank. Even the underside of this pressure-cast cross-brace is a thing to behold: an intricate universe of webbing—and a lot of empty space. Space weighs nothing. Or at least not much.

Tempting though it may be, it's too simplistic to explain the Gamma's leanness totally in terms of its frame. Suzuki's weight-watchers have been everywhere. Pop off the rider's section of the saddle: 1.9 pounds. Our Canadian-spec bike weighs exactly one pound more than the Japanese domestic model. The difference, we think, lies solely with the dog-eared directional signals on the North American version.

Suzuki engineers may have sweated as much over the RG500's power characteristics as the running gear's weight. High-performance two-stroke engines traditionally have relatively narrow powerbands with exciting, high-rise curves. Disc-valve induction, which provides intake timing independent of piston position, has been one method of broadening power, extending and increasing power output at ever higher redlines.

In GP racing, Suzuki stuck with rotary-valve induction. After a point, Honda and Yamaha engineers felt peak output was less important than manageable,



soft power in the so-called sub-powerband and turned to reed-valve induction for their 500 GP bikes. In the street-Gamma, as well as in the last-series RG-racers, Suzuki engineers spread power with an exhaust valve arrangement. In Suzuki's Automatic Exhaust Control System, an electric servomotor and cable system rotates barrel valves, located in the roofs of the exhaust ports, according to engine speed. These barrel valves, which have large passageways through their centers at right angles to their rotational axes, open up into small ante-chambers cast into the cylinders above the ports, effectively increasing the head-pipe volume, in a way reminiscent of

Honda's ATAC system with its butterfly valve and sub-chamber.

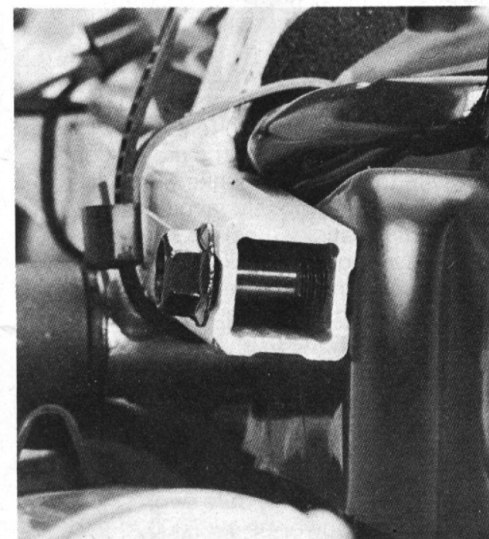
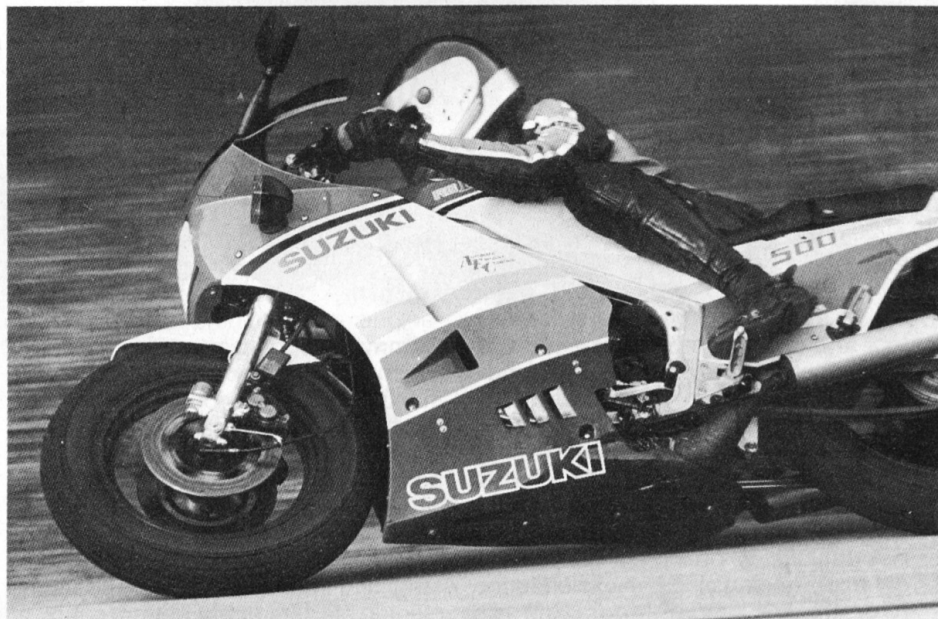
Turned on a six-and-12 line, the valves and their passageways are open doors to the ante-chambers; rotated to a position on a nine-to-three line, the valves seal off the roof of the exhaust port. The barrel-exhaust valve itself may resemble the Yamaha system in appearance, but functionally the Suzuki valve, far away from the port window, does not operate like a window shade varying the effective exhaust port height. And in the Suzuki system, the barrel turns quickly to an open or shut position; Yamaha's barrel valve lifts gradually over a period of a few thousand revs. All these exhaust-valve systems, however,

have the same effect: they boost mid-range engine power. Varying the exhaust volume (or effective exhaust port height) allows the arrival of the pressure wave coming back to the exhaust port window from the far end of the pipe to be spread out over a controlled schedule. That's important because this pressure wave actually stuffs the leading front of the fresh charge, coming in through the transfers and flowing out the exhaust port, back into the cylinder. It's this system, akin to stuffing a sausage from both ends, that allows two-strokes to make impressive power. For good bottom-to-midrange power, the trick is to fool the engine into acting as if the exhaust port opens late, and then,

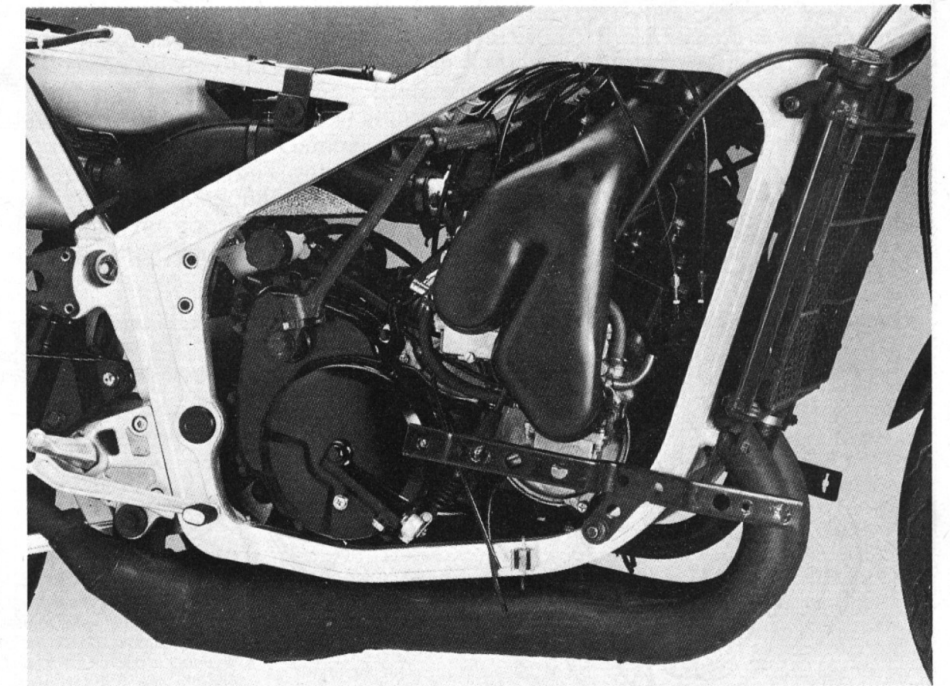
with increasing engine speed, allow it to believe the port is opening much earlier (or higher) for strong top-side punch. More tools that spread power in the RG are the relatively small and short 28mm Mikuni flat-slide carburetors and the "Suzuki Intake Power Chamber," a fancy name for a tube running between adjacent sets of carburetors. The interconnector terminates above and behind the flat slides in the carb bodies, and there the carbs have small built-in venturis. This open channel lying behind the slides and in front of the rotary valves allows one cylinder drawing charge from its own carb to feed also from the carb of its companion cylinder at high engine speeds. At low and me-

dium engine speeds the "small" 28mm carbs are necessary for relatively clean and crisp carburetion, because big-bore carbs, say 36mm, wouldn't atomize fuel properly. At high engine speeds, though, a single 28mm carburetor lacks the size to meet the demands of its cylinder, and here the interconnector aids the struggling carb.

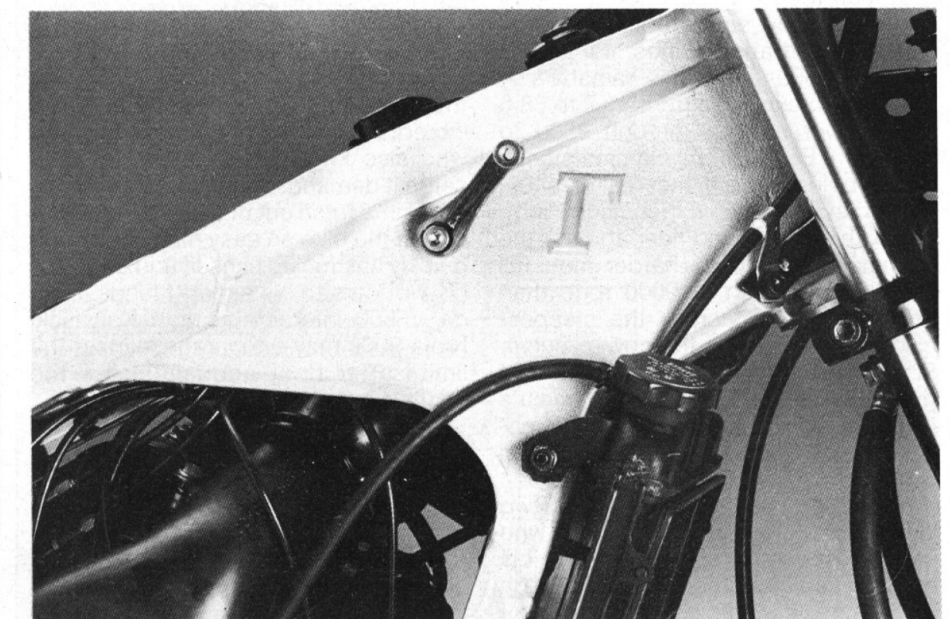
In the Gamma, cylinders on the same side run 180 degrees apart; when the rear cylinder is taking in charge (a vacuum in its inlet tract), the front cylinder's tract affords a high pressure area (rotary valve is shut). The carb slides to both cylinders are open, but in the front cylinder the charge stacks up behind the closed valve. With the manifold connec-



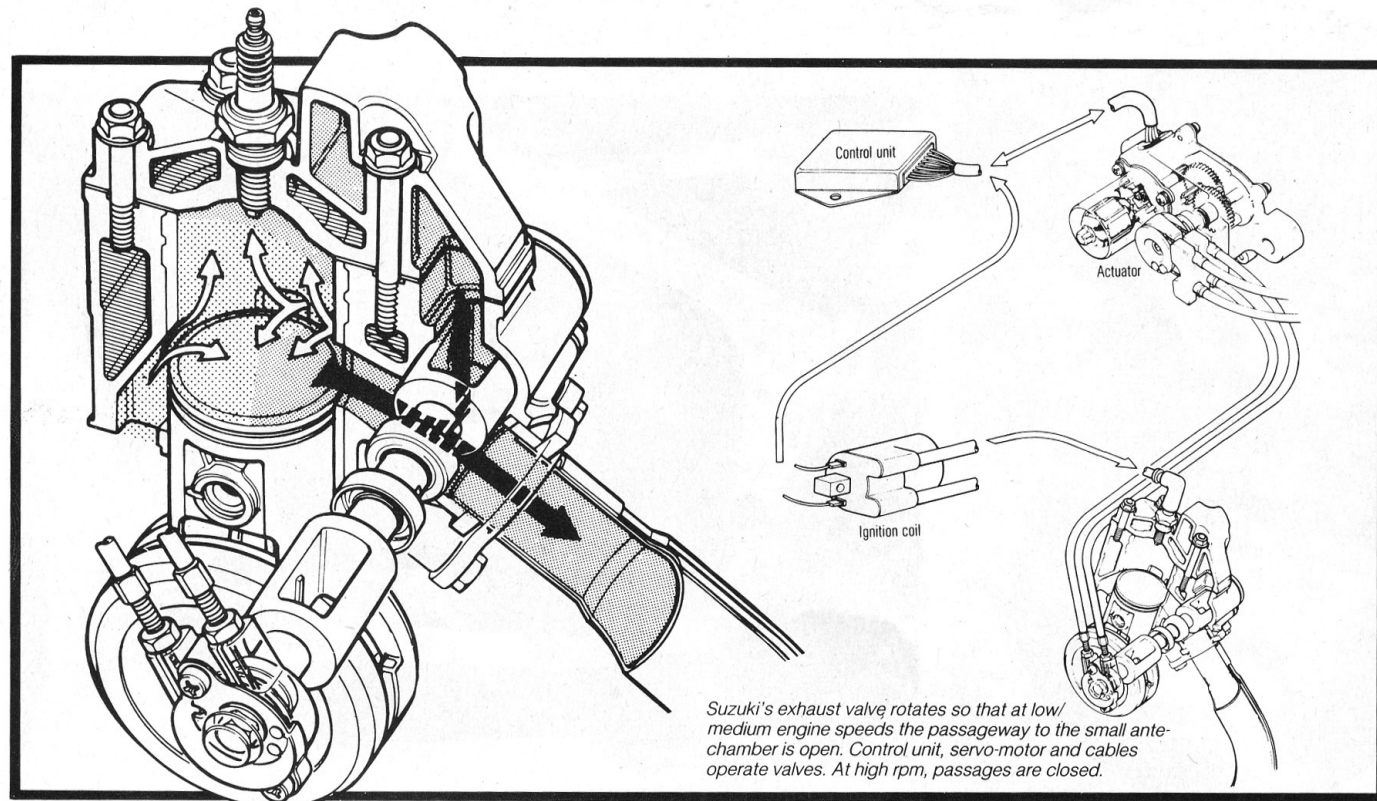
You might own an RG just to look at its parts. (Above) An end cut of tube shows ribbed corner construction; the cast steering head has a pebbled finish.



The long runners connecting to 28mm flat-slide Mikunis are carefully shaped to prevent air kinks and turbulence. Thin radiator has enormous area for effective cooling; no fan is fitted to the Gamma.







Suzuki's exhaust valve rotates so that at low/medium engine speeds the passageway to the small antechamber is open. Control unit, servo-motor and cables operate valves. At high rpm, passages are closed.

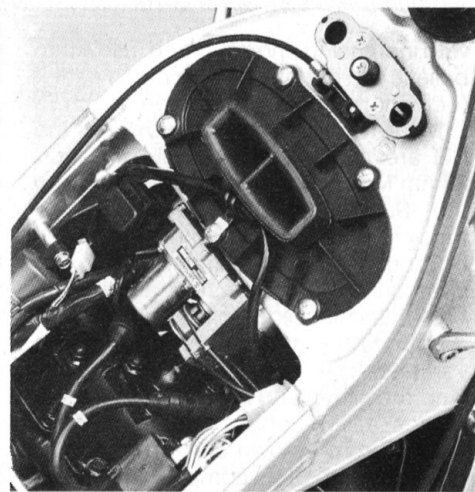
# SUZUKI RG500

tor; this fresh charge is pulled into the rear carb, where it's discharged into the inlet stream. The rear cylinder gets an extra charge of mixture, just as if the rear carb were suddenly larger.

Despite the engineering department's skillful and resourceful massaging, the Gamma's output curve still resembles a spike. Imagine a motorcycle that whistles along at 6500 rpm making 32.7 horsepower, and then in a single shriek doubles its output and more, reaching almost 70 horsepower at 9000 rpm. That's 37 horsepower concentrated in a single snap across 2500 rpm.

In our recent experience the only other normally aspirated motorcycle that more than doubles its power across a 2500-rpm field is Yamaha's V-Max, which explodes from 41.7 to 88.6 horsepower running through 3500 to 6000 rpm. Even so, the Gamma's *snap* quality belongs in a higher realm. A 406-pound motorcycle is genuinely light, and with a 150-pound rider aboard, the Gamma actually jumps harder under full throttle, 6500 rpm to 9000 rpm, than does the V-Max across the steepest 2500-rpm incline in its power curve. Power-to-weight figures support that gut feel. For a street bike, the Gamma's power-spike quickness is for most riders about a dozen heartbeats beyond full terror.

Strangely, the Gamma attracts two kinds of motorcyclists: first, those who love the RG500 for what they think it is but who can't ride the bike well enough to be sure; second, a tiny minority of



This could be our favorite Gamma part: a pressure-cast steering head into which the air cleaner fits. Key and cable system unlocks tank. Electric servo-motor and cable system controls the exhaust port valves.

truly expert riders who understand how incredibly good the RG can be, and who also know what patient, studied setup it demands. Anyone who hops on a Gamma fresh out of the crate and proclaims the bike an easy machine to ride quickly has fooled himself and betrayed his wet ears to his expert friends. Honda VF500 Interceptors and Kawasaki Ninja 900s may encourage skirting the limits after brief acquaintance—the Gamma is another story.

A different, more complex motorcycle, the RG-Suzuki is much like a race bike: extraordinarily sensitive, in need of expert tailoring to individual riders, and potentially lethal in the hands of fools. And like a road-racing motorcycle, the Gamma's limits at first lie far out in murky territory. You must approach

those limits carefully and deliberately, because the RG draws the boundary line between safety and road rash far narrower than other sport bikes. What's more, an engine with light-switch power makes that thin line brittle as well. That's just for starters.

Item: Tire selection. Our Gamma came shod with a Michelin A48 110/90-16 in front, and a M48 120/90-17 at the rear, relatively tall, high tires that aren't by current sporting standards particularly sticky. The stock tires do, however, give the Gamma necessary ground clearance; with them you nick the sidestand pad on the left and graze the faying on the right. Furthermore, the M48 profile keeps a big rubber patch on the ground when the bike is leaned over and accelerating. Think of the A48/M48 combination as a warning to the initiated: *stickiness isn't everything*. Try a soft, tall rear with a wraparound tread and you'll find its narrow contact patch undesirable because the Gamma's steep power curve spins the tire off corners with the bike still banked over. It's likely Suzuki purposely avoided low-profile, super-sticky tires like Michelin's superb Hi-Sports: familiar with such tires, a rider might be encouraged to fling the Gamma into the first available set of corners, use up ground clearance, dig the pipes into the pavement, and find himself in a heap of trouble in no time flat.

Item: The powerband. Riding the Gamma on tight twisting canyon roads is no treat. Expert riders won't find enough horsepower below 7000 rpm to entertain themselves, but they can get "manageable" power by riding at 8000 to 10,000 rpm and up, where the power

curve is less steep. Upstairs in its rev range, the Gamma comes off trailing throttle in a corner and back on power crisply. Wham, hit, snap, *whew*. Your own breathing difficulties aside, you'll have the Gamma hauling so quickly and so fast after three or four corners, you won't dare continue. Ride the bike in the 7000-to-9000-rpm range, and you're in the powerburst minefield of the rev band. As unsettling and unmanageable as the Gamma is in the tight stuff, it's best just to forget those knotty little canyon roads.

Ninjas, FJs, FZs and other sport bikes won't really unload the front end when accelerating out of corners; the RG does, and the rider must pay attention to where the airborne front wheel is pointing when the corner starts to open up. Cock the wheel sideways when it's airborne, and as the tire makes firm, full contact with the ground the bars will reward you with a healthy shake. The shake passes in a moment, though hardly unnoticed by the rider.

Dust and dirt in the exit line of a corner might well command the rider's attention also. The powerburst requires vigilance with regard to traction, even on clean roads. Please note that the Gamma, nose-light while accelerating off a corner, would become, ah, problematical should the rear tire spin lose. Given the RG's steep power curve, the two-stroke's revs jump 1000 or so (and about 12 horsepower) before a rider can react. By instinct he wants to snap the throttles down; by knowledge, to back gradually out of them. Steep power curves, however, combined with zippro-flywheel effect, make backing out delicate and difficult. Get the picture?

Short connecting straights between your favorite corners fold into their centerlines and vanish. With another bike your mind might rest along such places, but the Gamma gives little peace here. Under hard acceleration the front is always light; the front tire, even in the upper gears, seemingly skims the pavement. The RG squats back on its haunches; the front end extends, slowing down the steering and putting the Gamma in its most stable attitude. Comforting, yes, but remember a front wheel trying to go airborne feels *very* light.

Bang the throttles shut and jump on the brakes. The brakes, you conclude at first, are fabulous. Eight live pistons jump to your bidding in the two front calipers, and two service the tiny rear disc through the rear caliper. The rear brake is just superb: progressive and not too powerful. That's good—a panic-stricken locked-up rear wheel would have the RG rider just a kiss away from the emergency-room nurse. The front binders are powerful, predictable, impressive, yet the Gamma's

blinding approach speeds to corners make the brakes, after a while, feel merely excellent.

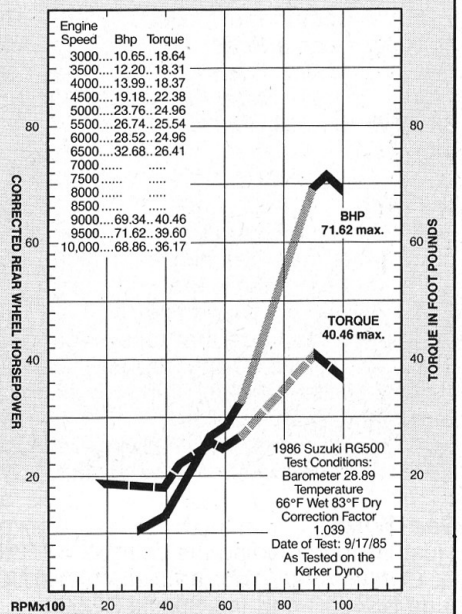
Braking drives the RG's nose down hard, and here the anti-dive system keeps the bike in a reasonable attitude. You'll not forget the Gamma has a steep fork angle. You'll get irritated at yourself as you continue to turn the Gamma in too soon, cutting corners too tightly, when you could have run the

bike in deeper, clicked over later and still had road to spare. In its nose-down attitude the Gamma sweeps over bumps without fluttering the bars ominously. While bumps often enrage motorcycles with steep head angles, the RG remains stable and composed over rough pavement, even with the front suspension loaded. Nevertheless, the 500 always responds *now* to rider input,

(Continued on page 84)

## TEST SPECIFICATIONS

Make and model . . . . . Suzuki RG500 Gamma	Suspension, front . . . . . Center-axle, air-adjustable fork with 38mm tubes, adjustable spring preload, and anti-dive valving
Price, suggested retail (as of 10/8/85) . . . . . NA	rear . . . . . (1) shock absorber, adjustable for spring preload
<b>Performance</b>	Wheelbase . . . . . 56.1 in. (1425mm)
Standing start ¼ mile . . . . . 11.37 sec. @ 120.08 mph	Rake . . . . . 25.2°
Acceleration, 0-60 mph . . . . . 3.04 sec.	Brake, front . . . . . Hydraulic, dual-disc with dual-piston calipers
45-70 mph, top gears . . . . . (4) 7.44 sec., 591 ft. (5) 9.04 sec., 730 ft. (6) 12.64 sec., 1031 ft.	rear . . . . . Hydraulic, single-disc with dual-piston caliper
Braking, 60-0 mph . . . . . 111 ft.	Wheel, front . . . . . Cast, 2.50 x 16 rear . . . . . Cast, 2.75 x 17
Horsepower @ 60 mph . . . . . 9.2 hp rider up, 8.1 hp rider down	Tire, front . . . . . 110/90 V16 Michelin A48 rear . . . . . 120/90 V17 Michelin M48
Engine rpm @ 60 mph, top gear . . . . . 4319	Seat height . . . . . 31.3 in. (794mm)
Average fuel consumption rate . . . . . 34.4 mpg (14.6 km/l)	Ground clearance . . . . . 5.8 in. (146mm)
Cruising range (main/reserve) . . . . . 155/45 mi. (249/72 km)	Fuel capacity (main/reserve) . . . . . 4.5/1.3 gals. (17.0/5.0 l)
Load capacity (GVWR less curb weight) . . . . . 336 lbs. (166 kg)	Curb weight (full tank) . . . . . 406.0 lbs. (184.2 kg)
Maximum speed in gears @ engine redline . . . . . (1) 50 (2) 76 (3) 97 (4) 114 (5) 127 (6) 139	Test weight . . . . . 546.0 lbs. (247.7 kg)
<b>Engine</b>	<b>Electrical</b>
Type . . . . . Two-stroke, rotary-valve-inducted square four with exhaust-port valves; liquid-cooled	Power source . . . . . Three-phase AC generator
Bore and stroke . . . . . 56.0 x 50.6mm (2.20 x 1.99 in.)	Charge control . . . . . Solid-state voltage regulator
Piston displacement . . . . . 498cc (30.4 cu. in.)	Headlight beams (high/low) . . . . . 60/55 watts
Compression ratio . . . . . 7.0:1	Tail/stoptlights . . . . . 8/23 watts
Carburetion . . . . . (4) Mikuni 28mm flat-slide	Battery . . . . . 12V 10AH
Exhaust system . . . . . Four-into-four with expansion chambers	<b>Instruments</b>
Ignition . . . . . Battery-powered, inductive, magnetically triggered	Includes . . . . . Speedometer, odometer, tripmeter; tachometer with 13,000-rpm redline; water temperature gauge; warning lights for low oil level, sidestand down; indicators for high beam, turn signals, neutral
Air filtration . . . . . Oiled foam element	
Oil capacity . . . . . 0.7 qts. (0.7 l)	
Bhp @ rpm . . . . . 71.62 @ 9500	
Torque @ rpm . . . . . 40.46 @ 9000	
<b>Transmission</b>	
Type . . . . . Six-speed, constant-mesh, wet-clutch	
Primary drive . . . . . Straight-cut and helical gears; 58/26, 2.23	
Final drive . . . . . #530 chain; 16/40 sprockets, 2.50:1	
Gear ratios (transmission) . . . . . (1) 29/11, 2.64 (2) 28/16, 1.75 (3) 29/21, 1.38 (4) 27/23, 1.17 (5) 23/22, 1.05 (6) 22/23, 0.96	
Gear ratios (overall) . . . . . (1) 14.72 (2) 9.76 (3) 7.69 (4) 6.52 (5) 5.85 (6) 5.35	
<b>Chassis</b>	
Type . . . . . Double-downtube, full-cradle, box-section aluminum perimeter frame; box-section aluminum swing arm	





and the RG pilot shall in all cases remain smooth and graceful.

Specific riders fit the Gamma to themselves just like a custom-made set of leathers. Here's one setup as assembled by 130-pound Daniel Coe. Antidive: number-one position. Fork air pressure: six psi. Fork spring preload position: one-point-five (one is lightest). Fork tube position: tubes dead-even with the topside of the upper triple clamp. Rear spring preload: one-point-five. Tires: front, Dunlop 120/80-16 Sport Elite, RS compound; rear, standard-issue Michelin M48 120/90-17. This front-end configuration satisfied DDC: suspension, tire, settings, everything except the fixed-position handlebars. Coe would have modified the bars, moving them down and outward slightly for greater comfort and leverage. Dan'l also knew how he would refine the rear end: a tall 17-inch tire, much like the M48, with a similar profile for a similar contact patch, but softer and with more grip. Coe couldn't get too prescriptive about the rear suspension because he hadn't settled on a final tire choice. Right now, if he could, he'd soften the rear spring, using less preload, and boost rebound damping. That's impossible with the Gamma shock, adjustable only for spring pre-

load. In a perfect world the RG would have a totally adjustable shock, so that springing and compression and rebound damping could be orchestrated.

The front Dunlop was in place for the braking tests; that, and the phenomenal brakes, explain a stopping distance of 111.33 feet from 60 mph. Just as a point of comparison, the GS1150 *Cycle* tested in the May 1984 issue, required 129 feet.

Don't even bother looking at other 500cc bikes for comparable quarter-mile times: The RG ran the 440 in 11.37 seconds at 120.08 mph. Coaxed by DDC's Grand-Prix bike experience to produce some perfect launches, the Gamma would loft and carry its front wheel all the way through first gear. The next quickest 500 we've sampled is the RZV500R Yamaha at 11.77/117.77 mph. The 750 sport bike closest to the Gamma is Yamaha's 11.39/117.54-mph FZ750. To absolutely, positively go quicker in the quarter mile, you'll need a 900/1200 Superbike.

Heaven help us, the Gamma is just too intense a motorcycle to ride on a daily basis. You should approach the RG only when your bio-rhythm charts say your waves are right for it.

Unfortunately, the RG will never be right for the EPA, wet blankets intolerant of two-stroke exhaust effluent. This

circumstance is less tragic than you might at first think. Suppose you made a GSX-R750 with Gamma-like light-switch power and the same performance and intimidation factor. Surely, most customers if given a choice would opt for a "more normal" bike with easily modulated power. Or, put another way, if Suzuki could federalize the RG the bike would need a broader, softer powerband for the company to sell more than a handful as curiosity pieces.

If you're one of those handful of Gamma owners, pick your roads as carefully as you monitor your bio-rhythms. We'd specify an open, fast, winding two-lane blacktop that you know like your mother's handwriting. Intimate knowledge of the road lets you concentrate on the RG, get into the engine speeds the Gamma enjoys, and generate ground speed that will eventually bring you eye-to-eye with a county judge. We would stipulate a 150-mile loop, with no backtrack routing. Although the RG's riding position and ergonomics suit much longer days, your mind will go limp way before your body. In fact, if you ride the Gamma the way it loves to be ridden, 150 miles will leave your mind absolutely wringing wet from exhaustion.

And frankly, folks, we wouldn't have a Gamma any other way. ■



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