

SUZUKI SP250



Full-Floater Rear Suspension Comes to Dual Purpose Bikes With a New 250cc Suzuki Four-Stroke

■ When Suzuki decided in 1978 to upgrade their entries in the dual purpose market, they hoped to make one step take the place of two: the smaller models remained two-strokes, as in the established TS line, but the new entry, a four-stroke, displaced 370cc. Built as the street legal SP and playbike DR, the 370 was supposed to offer a bit more than the traditional 250s, a bit less than the awesome 500s.

The SP and DR370s were good bikes. They did have more punch than the smaller rivals, less bulk than the larger ones. But they didn't set the sales charts afire, nor did the later SP and DR400s, again despite their good looks and performance. Suzuki planners followed their own line of development and came up with the DR and SP500, meeting the rivals cc to cc, and beating them in many ways.

All of which leads to this year's new idea, the SP250. As logic dictates, there's also a playbike DR version. As you'd also guess, Suzuki is tired of trying to make one model do the work of two and expects to gain 250 sales by making a new and better 250.

The new is beyond doubt. The 250 engine is a smaller version of Suzuki's 500cc Single, with Twin Swirl four-valve head, a moderately oversquare bore and stroke of 72 by 61.2 mm. The compression ratio of 8.9:1 and the swirling of the charge gives good torque and allows no-lead or low lead, in fact Suzuki recommends no or low with an averaged octane (as shown on the pump) of 85 or better. If the engine pings, the manual instructs, change brands but don't use leaded fuel.

The 500 and 250 don't share parts but because they're the same thing in two sizes, the 250 contains a counterbalancer, as seen of course in the class rivals as well. There are two exhaust pipes for the two exhaust valves, and they tuck tightly back, join and run into a silencer and then to a secondary muffler, again like the others except that the Suzuki makes some nice noises. Nothing rude, but you know it's a healthy little engine down there. Five speeds, oil carried in the crankcase.

The SP has a Mikuni CV carb. The lack of a spring-loaded slide and heavy return spring means the SP's throttle is feather light. Snaps open quickly, almost no resistance and the psychology of that means the engine feels willing to go.



Along with that, the light pull means the throttle can have lots of leverage, so it's quick, with maybe a quarter turn from idle to wide open.

Starting is by foot, aided here by a semi-automatic compression limiter. Semi in that Honda and Yamaha 250s have valve lifters linked to the kick lever. When the lever is kicked, the exhaust valves are opened. This works but the rider never knows where the engine is in its sequence of four strokes.

The SP, though, has a hand lever that opens the exhaust valves until the piston has been eased just past compression. Pull it in and it stays in until, click, the piston is in the right place.

Again like the others, the SP250 has gained a lot from motocross. Rear suspension is Full Floater, with one rear shock riding in links between the frame and the swing arm, said linkage selected to give rising rate suspension, as done on the RMs and they are known as the best there is. The swing arm is impressively large, steel welded into a box section and sized for at least as much stress as they'll ever get. The rear axle is positively located in sliding blocks within the arm. The frame is open cradle with the engine a stressed bridge between the single front downtube and the double tubes at the rear. Drum brakes, leading axle forks with valves for air, just as you'd expect.

For the past several months these columns have remarked about how on/off road bikes are using motocross style. The SP250 follows this except that by now the comment isn't accurate. Instead, the short, high fuel tank with square seat, the short and wide fenders and low handlebars, came into vogue on motocross models, spread to the enduro lines and now are seen on the dual purpose bikes, from all the factories at about the same time.

And so goes the SP250. This isn't a complaint. It's a clean design. Excepting perhaps the rear fender, which is too short to keep water off your back and all modern motorcycles have that shortcoming except maybe the FLH, none of the forms of the SP interfere with function. Where the looks are awkward, for example the wide front fender, they serve a purpose. Plus the red paint is a warm and bright red, the contrasting trim stripes don't overwhelm and the finish, on plastic and metal alike, is top notch. Even the welds on the swing arm are nicely done.

Cost is a consideration in the on/off class, and not much money has been spent where it needn't have been. The instruments are a speedometer and three



SP250

warning lights; neutral, turn signals and high beam. Adequate, but no more than that. There's no tachometer, which isn't a great lack, although the SP could have had markings on the speedo for shift points, as the Honda does.

The SP's electrics are six volt, presumably because the battery is lighter and smaller and easier to tuck behind the panels. And the headlight and taillight are bright enough without being the lasers you get with 12 volts and halogen bulbs. One minor thing, though, is that the

warning lights are dim, so dim the rider has to squint to be sure the neutral light is on even on cloudy days. And one of the older riders got so tired of not seeing the signal warning that he reverted to hand signals, just like in days when blinkers were optional and batteries all went dead.

Tools and papers live in a plastic box bolted to the frame below the left side of the rear fender, again like brands H and Y. The lid of the box is rubber and it seemed to seal well and stay put. Not quite the same design as Honda's, but because we've lost more than one set of Honda tools and papers when the lid flapped open in the woods, we never did

trust this box, despite not having it come open.

The SP comes with passenger pegs and one of those darn straps at midseat. Somehow it was removed for the photos and never got re-installed. Somehow. The fork lock is on the forks, not part of the switch on the bars, but because the lock is easily reached with the bars at full left, the location was no problem.

The SP250 doesn't match Suzuki's usual profile, which is giving the customer a bit more bike for the money. The road models, for instance, are usually larger and more roomy than their class competition.

The SP, though, is a bit smaller. This isn't bad and it gives a choice between the 250 and 500s, just as Yamaha does and Honda doesn't do as much.

For instance, test weights:

Suzuki SP250	273 lb.
Yamaha XT250	267 lb.
Honda XL250R	285 lb.
Kawasaki KL250	293 lb.

And wheelbase:

Suzuki	54.1 in.
Yamaha	55.5 in.
Honda	54.7 in.
Kawasaki	55.1 in.

And seat height:

Suzuki	32.5 in.
Yamaha	33.3 in.
Honda	34.5 in.
Kawasaki	33.0 in.

Some of the differences are more er, different than others, and none are critical, but the Suzuki's total is the smallest.

And it feels the smallest. Also unlike the other Suzukis, the SP has the seat closer to the bars than average, so it feels short. The bars being close and wide give lots of leverage. The SP turns quickly and in traffic reacts to the edge of darting back and forth. This was a puzzle for a while because it tracks fine, steers even better and the actual balance is so good the rider can practice coming to a stop and staying upright for a second or two, which led to the conclusion that the rider is feeding the steering more input than is needed or intended.

Minus, the seat slopes forward and makes sure the rider is right up there on the tank with arms outstretched. And the seat is narrow and square, yeah for the third straight month we have us a motocross seat, the kind that's fine as long as you don't sit on it. We have surrendered in that we no longer expect flip-up seats, handy though they were, but this doesn't mean seats for sitting couldn't be wider and more rounded and liveable all day. Which the SP's isn't.

The engine is mildly tuned, under less stress that is, and it idles and pulls well. What it doesn't have is power. City traffic is no worry but on the highway the engine sounds busy at more than 60 mph and if there's a headwind or slight upgrade the rider is surprised to turn the throttle and



discover it's already turned as far as it will go. The SP250 owner will protest the national speed limit on principle only because 55 is the SP's natural cruising speed. It's not being overworked faster than that, exactly, it's just that there's not much left. (Not that anybody would ever try such a thing, but the SP will lose to the XL and XT at the drags.)

Is that criticism? No. The SP runs well and runs fast enough and is economical, it just isn't very fast and that's a fact.

Because the SP was a nifty city scooter, and we all know dual-purpose bikes are compromised, it was rewarding to learn that the SP is also a good dirt bike. It

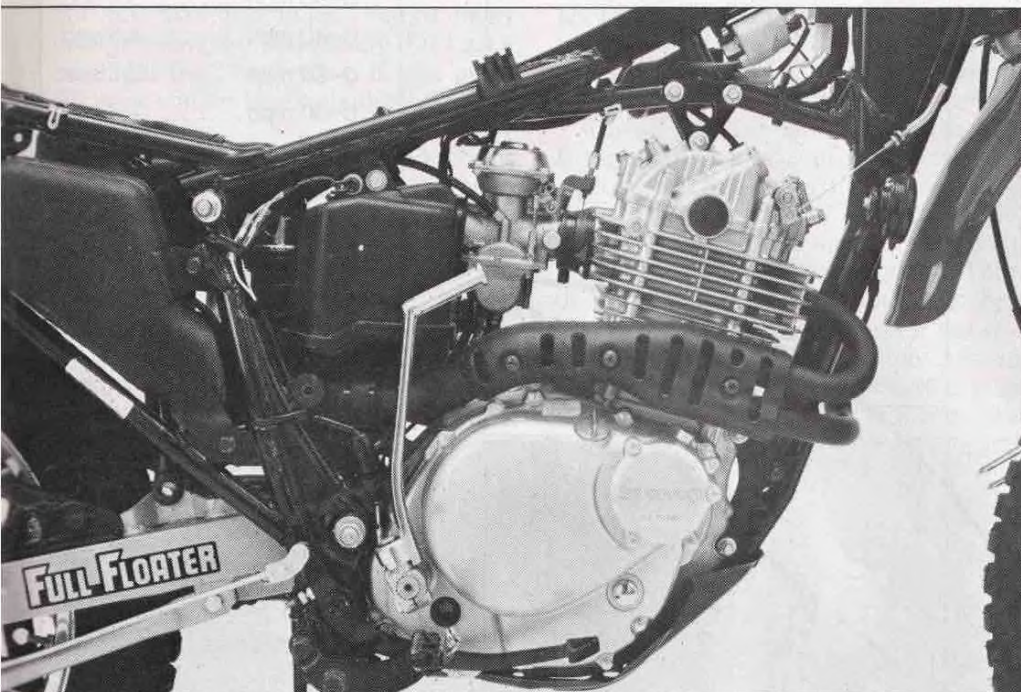
climbs the hills it should climb and it steers astonishingly well. Front digs in and around she goes. The forks and rear shock are nicely tuned to each other, they are soft enough in ruts and small dips although neither end likes stutter bumps much, and when the suspension does bottom out it's the bike's way of telling you you're about out of power and traction anyway. The IRC trials tires float on sand and grip rock, sorry the rains have quit so we can't say they slip in the mud although these tires always have on all other dual-purpose models of our acquaintance.

One flaw is that the forward seating

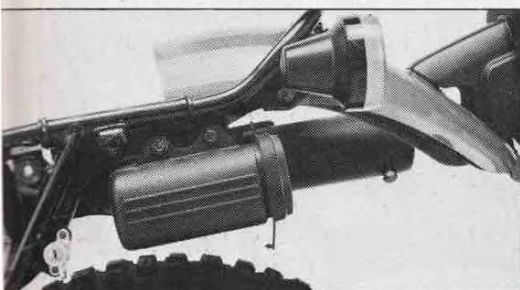
and lack of punch keep the front end down unless the rider has planned to lift it. The option of powering the front wheel up for a sudden dip isn't there.

Not quite a flaw was that the rear shock faded after an hour of riding as fast as the SP would go and the back began hopping and swapping in the whoops. This isn't as bad as it sounds because the SP was in company with the DR250 and a Husqvarna 250WR at the time; the fade resulted from demands beyond the call of duty and the SP is not an enduro bike.

In sum, the SP250 is good work and a welcome addition to the class. ✕



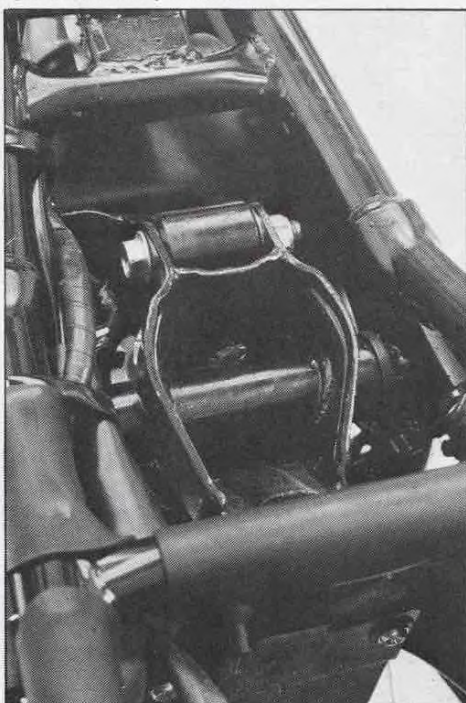
Suzuki's new 250 Single is slightly oversquare, has four-valve head and single overhead cam. Exhaust pipes are tucked away from rider's legs. Oil filter at right front is easy to reach.



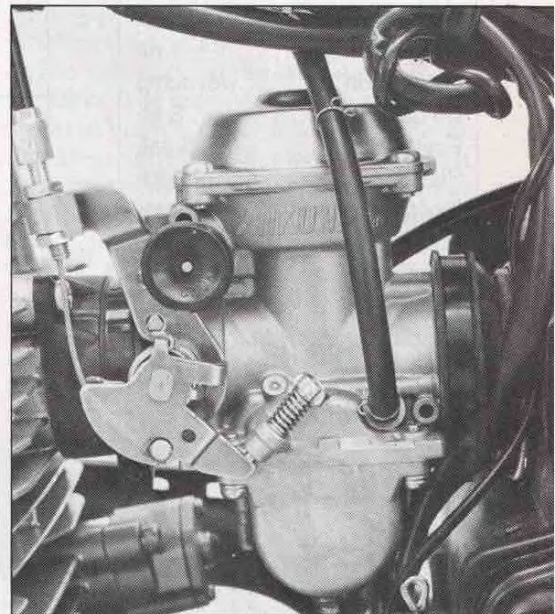
Tools and papers stow in plastic box below left side of rear fender. Dangling end is the strap to retain the cover, except that the strap fell out and the cover stayed in place.



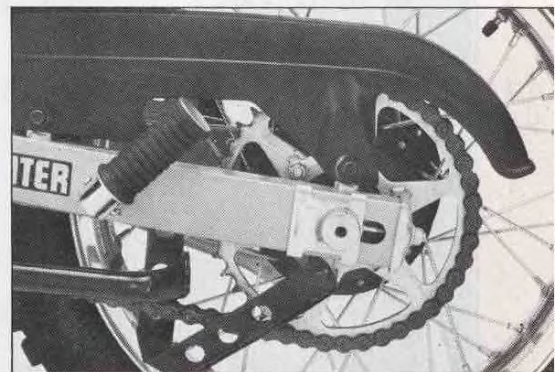
Short lever in front of clutch lever opens exhaust valves during compression stroke. Lever clicks off and piston is in the right position for easy one-kick starts.



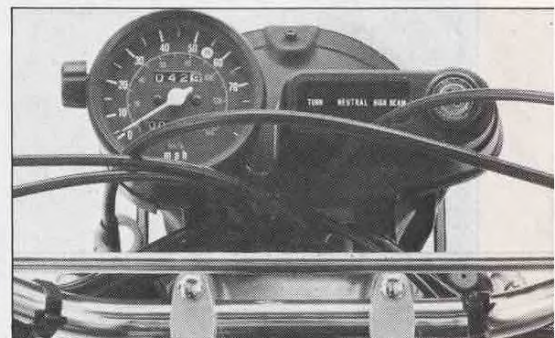
Lurking below the top rocker for the Full Floater suspension is the shock. The shock works, the system works but the shock is nearly impossible to service.



CV carb gives good response and allows a light, quick throttle.



Steel swing arm is big. Axle is braced and secured by box section and no flex comes through.



Instrument panel isn't lavish. The warning lights are dim, especially in sunlight and the fork lock is on the forks instead of incorporated in the switch.

SUZUKI SP250

SPECIFICATIONS

List price\$1589

Enginesohc Single

Bore x stroke72 x 61.2mm

Displacement249cc

Compression ratio8.9:1

CarburetionMikuni
BS34SS CV

Air filteroiled foam

IgnitionCD

Claimed powerna

Claimed torquena

Lubricationwet sump

Oil capacity1.3 qt.

Fuel capacity2.5 gal.

Starterkick

Electrical poweralternator

Battery6v 4ah

Headlight35/35w

Primary drivegear

Clutchwet multi-plate

Final drive520 chain

Gear ratios, overall: 1

5th7.95

4th9.71

3rd12.27

2nd16.39

1st25.61

Suspension:

Fronttelescopic fork
travel7.7 in.

Rearsingle-shock swing
arm with progressive
linkage
travel7.5 in.

Tires:

Front3.00-21
Bridgestone

Rear ...4.60-17 Bridgestone

Brakes:

Front5.51 in. drum

Rear5.11 in. drum

Brake swept area .36.8 sq. in.

Brake loading (160-lb.
rider)11.8 lb./sq. in.

Wheelbase55.3 in.

Rake/Trail28.5°/4.65 in.

Handlebar width32 in.

Seat height32.5 in.

Seat width7.5 in.

Footpeg height13 in.

Ground clearance10.5 in.

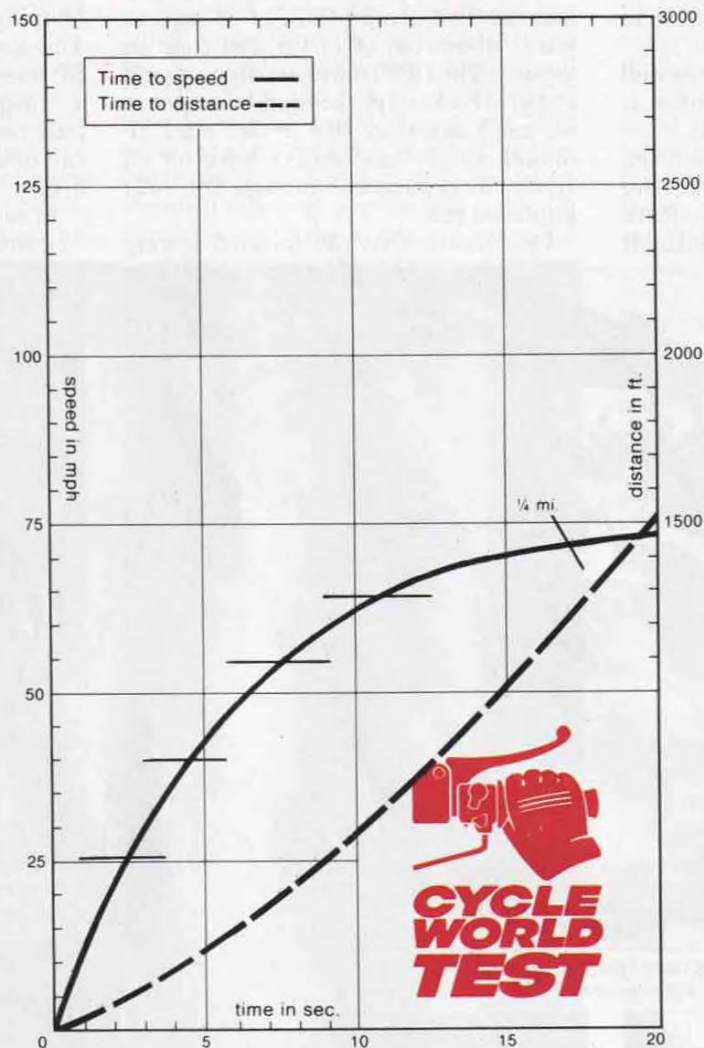
Test weight
(w/half-tank fuel) ..273 lb.

Weight bias, front/rear,
percent44.6/55.4

GVWR668 lb.

Load capacity415 lb.

ACCELERATION



PERFORMANCE

Standing 1/4-mile ... 16.91 sec.
@ 72 mph

Top speed in 1/2-mile ... 75 mph

Fuel consumption73 mpg

Range (to
reserve tank)162 mi.

Acceleration:

0-30 mph 3.4 sec.

0-40 mph 4.3 sec.

0-50 mph 6.2 sec.

0-60 mph 7.8 sec.

0-70 mph 14.4 sec.

Top gear acceleration:

40-60 mph 10.4 sec.

Maximum speed in gears
@ 9000 rpm:

1st 26 mph

2nd 40 mph

3rd 54 mph

4th 68 mph

5th 83 mph

Speedometer error:

30 mph indicated ... 30 mph

60 mph indicated ... 60 mph

Braking distance:

from 30 mph 32 ft.

from 60 mph 127 ft.

Engine speed
at 60 mph 6500 rpm

