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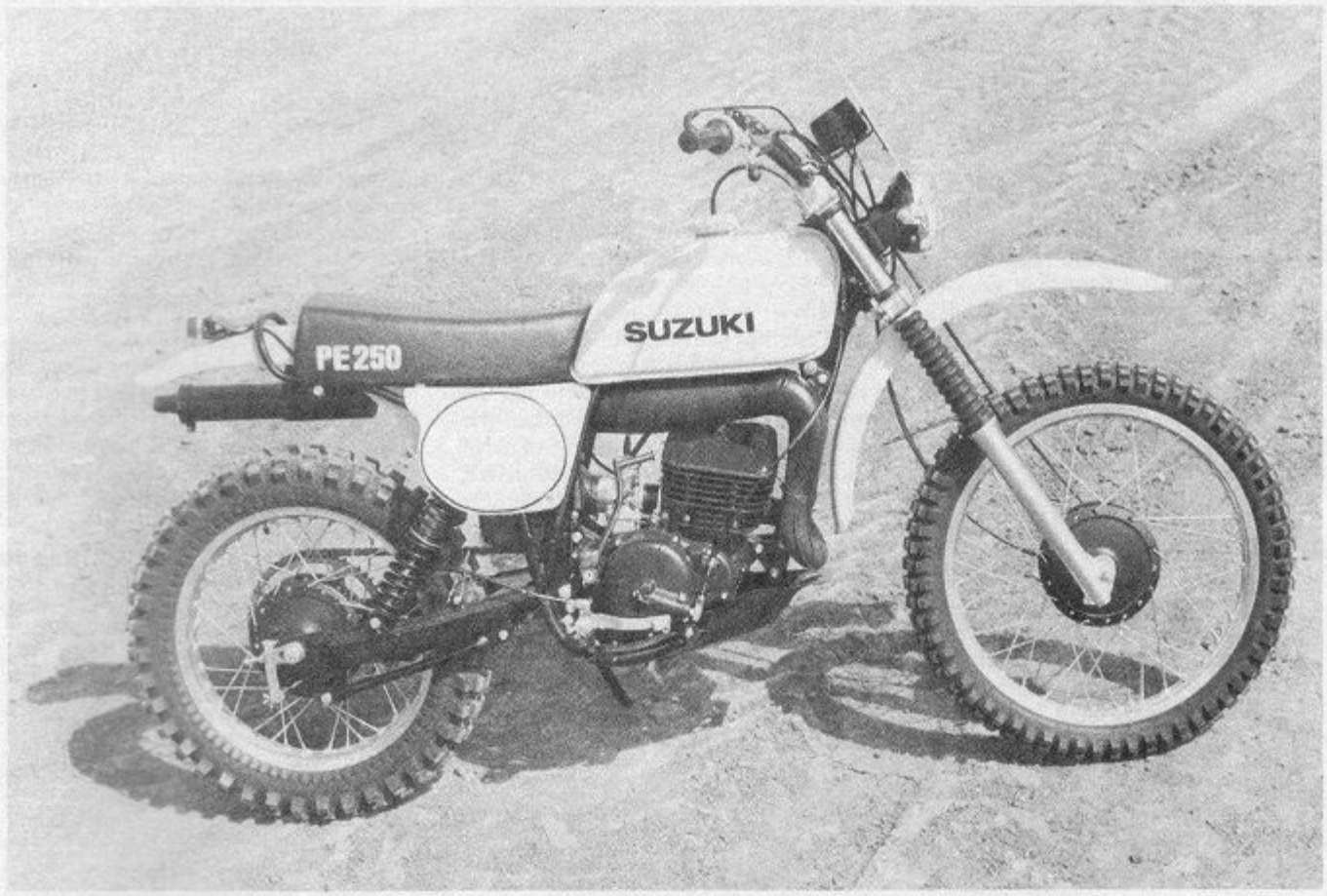
Photos by Mike Parris

Suzuki's PE-250 'SERIOUS' Enduro



The PE250 clearly shows its RM motocrosser heritage. Looks like exactly what it is: An RM with big tank and lights.

Suzuki has finally brought it out into the open. The motorcycle that rumor has had in existence for the last couple of years is finally a reality.

Yes, we heard at least two years ago that Suzuki had hung lights and a wide ratio gearbox onto one of their very successful RM-250 motocross machines and were investigating the possibilities of introducing such an enduro model to the public.

It took them a while, but here, at long last is the Suzuki PE-250 'serious' enduro motorcycle. It fits nicely into that newly created niche of hard-core off-road machines designated 'serious enduro' bikes. Bikes in this high performance category are basically nothing more than (like we said about the prototype PE-250) motocross machines with wide ratio gearboxes, lights and larger gas tanks than the MX machines.

The PE's biggest problem is that it has to compete in a relatively small marketplace, with consumers who are pretty doggone choosy. It has to compete against some outstanding European machinery. Now in the motocross field, the Japanese have just about caught up with the Europeans, and have passed them in sales figures. But in this specialized 'serious enduro' category, the Europeans still top the

Bike

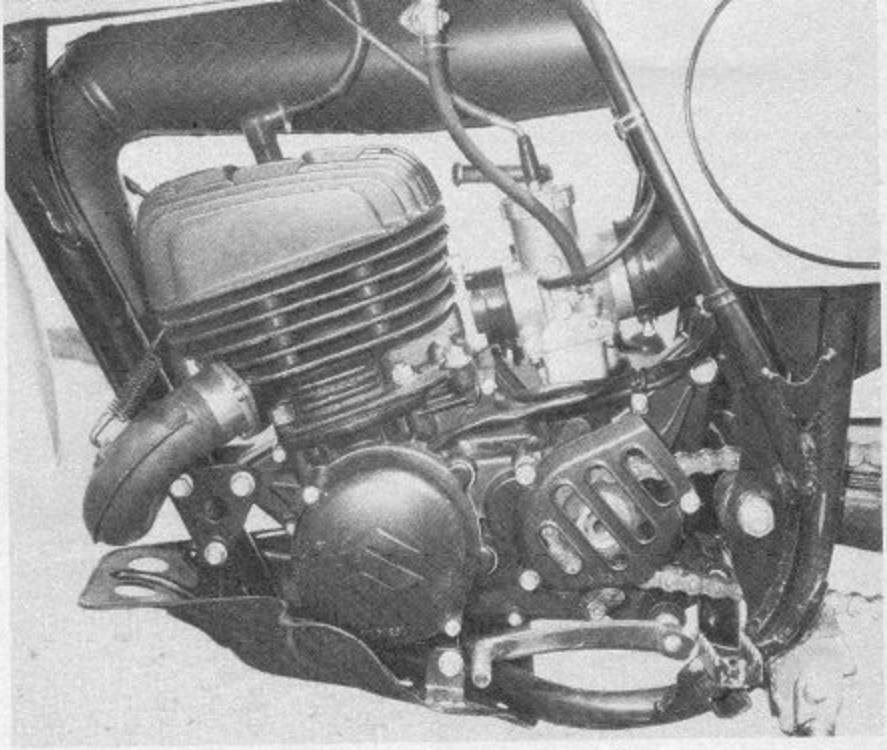
Just a little bit closer . . .

field.

That is changing. Such bikes as the PE-250 are going to change it.

Against its head-to-head competition, Yamaha's IT and Honda's MR, the PE-250 is entirely competitive, and has some advantages over the other two.

The biggest advantage that the others



Engine is basically from the RM too, but with milder ports, head and pipe. Gearbox ratios are better spaced for enduro-type riding also. Note metal skid-plate that protects exhaust pipe.

have at present is availability of alternative engine displacements. Yamaha, for example, has the 'field' well covered with 175, 250 and 400cc IT 'serious enduro' models. Honda has a 175 and a 250 MR.

Kawasaki is reportedly working on such a machine, and by next year Suzuki will most likely have other sized PE models.

It's a rapidly growing segment of the overall marketplace. 'Serious' enduro machines are coming into their own.

At first glance, the PE-250 looks like an RM motocrosser that's expecting. In a nutshell, that's just about what it is.

The bigger gas tank, a headlight/number plate/speedometer cluster, and larger (quieter) muffler give the bike a swollen look.

A number of components are interchangeable from the RM to the PE, and vice versa. The PE engine is basically an RM mill, with porting, head and exhaust pipe tempered down to make the bike more manageable at lower, trail, speeds. The end result, especially as compared to 'just' an RM with lights and a speedo, is a whole lot of torque and a wide power band to get you through just about anything.

The gearbox has been widened, for the same reasons, to make the bike more tractable in a variety of terrain. Instead of the very close ratio RM box, the PE-250 has a much wider spaced selection of five speeds.

The reed valve on both bikes is interchangeable, but Suzuki says that the carburetors are not. They cite differences in jetting and waterproofing on the PE version. Without extensive rejetting and much work, you can't merely switch them. Likewise the cylinder and head. The RM is much more radical than the PE. You could use a PE-250 crank in an RM-250B, but not the opposite. Reason: The PE-250 crankcase has a countersunk wall to clear the fifth gear gears.

In the transmission, there are some parts that can be swapped between the two bikes. All parts other than the countershaft, 1st driven gear, 3rd drive and driven gears, 4th drive and driven gears and 5th drive and driven gears are interchangeable.

Suzuki's list of interchangeable parts is pretty technical, and a lot of things that they say are NOT interchangeable would be if you made a few, fairly simple modifications. For instance, Suzuki says that the frames aren't interchangeable, because the PE frame requires re-positioning the CDI unit to accommodate the larger gas tank. Several other brackets are installed on the enduro frame as well, like to bolt on the skid plate.

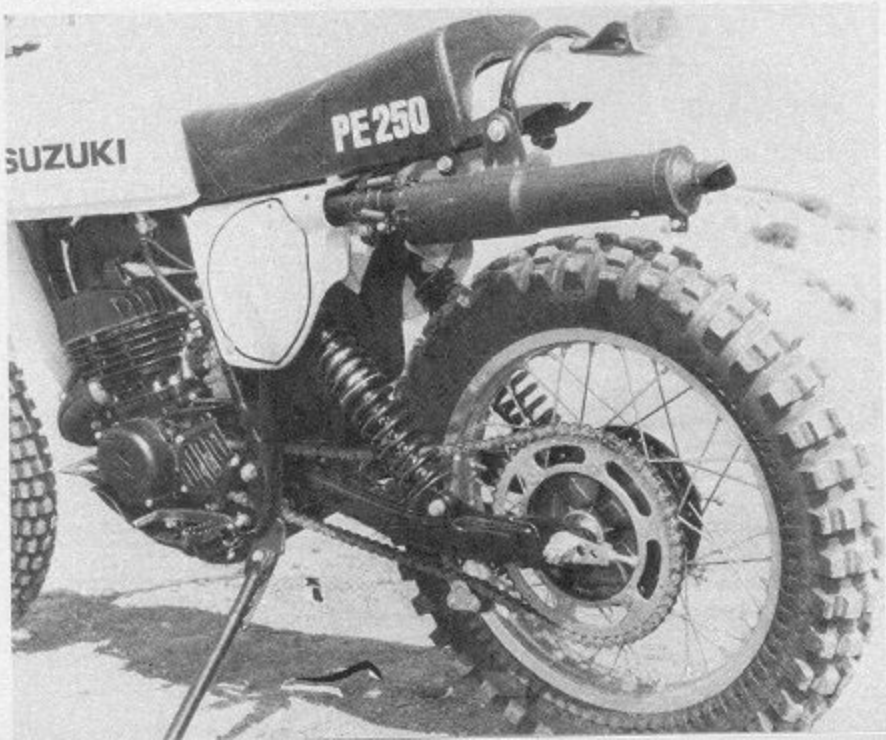
Geometry-wise, though, the two chassis are identical. The seat, side panels, fenders, wheels, etc. all bolt right on.

Some people will undoubtedly think that the PE-250 is just an RM with lights, but rest assured that this is a motorcycle with its own identity and personality. There is, as we've said, a lot of RM influence and the bike is based on the RM model.

The seat seems way too hard at first (it's lower and shorter as compared to the RM seat) but it's a fact that soft seats get more tiring, quicker, than harder ones. In the case of the PE seat, you'll 'custom-mold' it to the shape of your cheeks after the first good long ride. Once shaped, the seat is perfectly okay.

After looking at the PE's profile, you expect the gas tank to feel like just a deeper RM tank, but looking down at the top of the tank reveals that it is, in fact, a big fat, square-styled item that holds 3.2 gallons and is painted in Suzuki's favorite shade of racing yellow. The tank isn't so large and bulky that it will permanently interfere with your riding, and after an hour or so of riding, you won't even notice the 'bulge'. The tank top filler cap opening is nice and

Large "cannon" silencer is fairly effective, but bike could still be quieter. Suspension on rear is long travel Kayaba, just like the RM.



Headlight/number-plate area is tidy, but we wish that Suzuki had used a number-plate of a softer, more flexible material. This one is pretty stiff plastic and could cause substantial injury, in case of a rider going over the bars and trying to take a bite out of the plate. But this is an easy thing for the individual rider to fix on his own.

big, enough to accept any filler spout or funnel. Suzuki has also added a neat little safety strap to the plastic cap so that you don't drop it in the dirt during a refueling stop or lose it during a hectic pit stop.

Seat to handlebar height is comfortable, but we'd like to see bigger 'teeth' on the steel footpegs. If you get into really slimy, gooey going with these, you might have a little trouble keeping your feet on the pegs. Lighting switches and kill button are conveniently placed on the handlebars, which are considerably narrower than the RM motocrosser. Eastern riders and others who get to ride in trees all the time HAVE to have narrow handlebars, or they'd never get down the trails.

The speedometer is not very accurate, which we've come to expect from Japanese enduro bikes. It's good enough to tell you how many miles you've ridden, but if you're going to use your PE for enduros, you should plan on acquiring a VDO. The speedometer bolts onto a nifty bracket which also holds up the front number plate. That plate is made of a fairly hard, rigid plastic, which we'd like to see changed with something a little softer and more flexible. We've never had occasion to try and take a bite of the number plate as we flew over the handlebars, but we've seen riders who have and trying that with this plastic number plate which sticks way up above the headlight would be a darned good way to lose the lower half of your jaw. A potentially dangerous item that should be easy for the owner to change, though.

Both the headlight (which is protected by a heavy wire 'cage') and the taillight burn all the time the engine is running. The headlight has a low/high beam switch on the handlebars and the taillight brightens when you step on the brake pedal. But don't assume the bike is street legal, because it isn't. The potential is there to make it legal in some states (forget it in California), though.

The PE-250 is a very easy starting motorcycle. Carburetion is perfect for the intended purpose of the bike and except for the tiny little pull/push choke lever, the bike is very easy to get running. There is an adequate amount of low-end power, so you won't have to be jumping off and pushing madly at the slightest sign of a hill.

In fact, when we did photos of the PE at SoCal's Saddleback Park, we found a couple of terrible hills (steep, loose, rocky, etc.) and never did have any problem with the bike. (The rider blew it a couple of times, but the bike was fine!)

The whole powerband is outstanding. You don't have to rev the snot out of it to get it to go, yet there's that torque down low when you get into the tight stuff. Top end is nearly equal to the high-revving, ultra-powerful RM motocrossers.

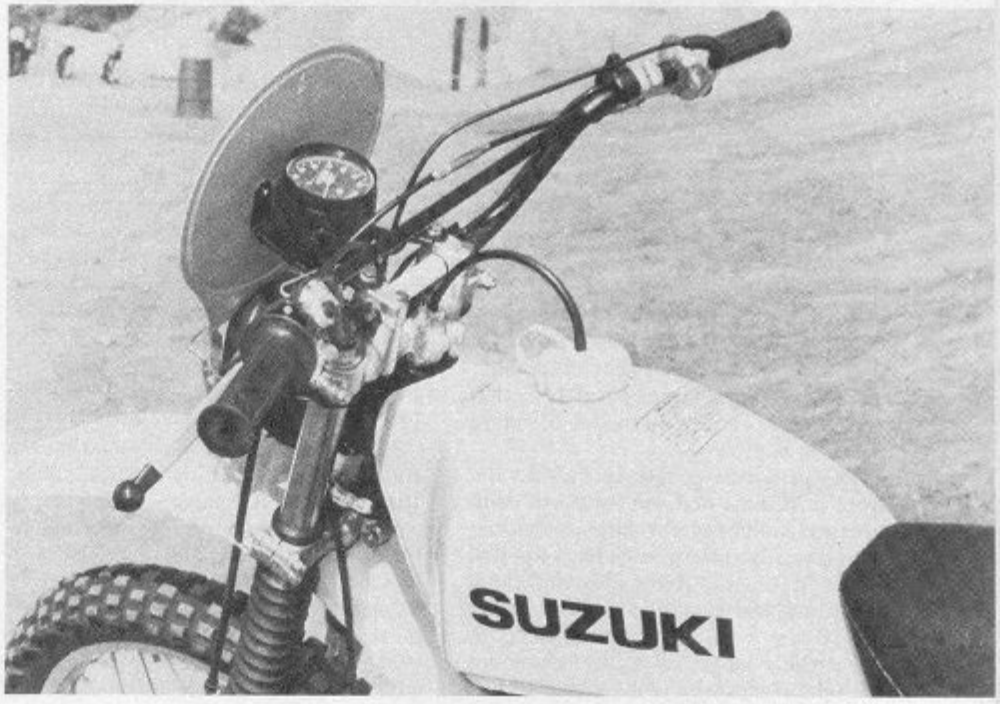
Now for the weaknesses . . . Yep, there are several areas in which Suzuki's offering to the 'serious enduro' (that phrase again!) rider falls short of competition. That includes not only all of the European machinery, but the Yamaha IT and Honda MR models as well.

First of all, let's talk about the suspension. It's pretty close to being very, very good. Just falls a little bit short.

Suspension is supplied by Kayaba, same as the motocrossers. The front forks are 'conventional' oil-damped telescopic forks that give a little over 7 inches of travel. The PE does not have air forks like the latest racers.

The rear Kayabas are forward-mounted, laid down gas-oil shocks that

Speedometer is not up to enduro standards. It's pulled right out of Suzuki parts inventory and just isn't accurate enough for the capable timekeeper. Handlebars are narrower than the RM racers, for the benefit of the woods rider. Biker is happier in the desert and on fireroads than in the woods, though.



help give 7.8 inches of travel. Not too bad, but the weaknesses will be brought up in a minute.

The bike weighs about 240 pounds, which doesn't exactly make it a lightweight. The weight is, though, right in line with the main competition, Yamaha's IT-250 and Honda's MR-250.

The main problem with the suspension is that it's too mushy for the hard riding racer. The bike is just fine for leisurely strolling down the trail or on smooth fireroads, but start really cooking in an enduro or two-day trial and you'll inherit a bunch of problems traceable to that basic mushiness. This is a fairly serious problem, as a motorcycle of this class and category HAS to have outstanding and predictable suspension so the poor rider can hang on for a full day of riding.

At a fairly quick trail pace, you get about two pot holes ahead of the suspension and then you're in trouble. The boingers are trying valiantly to catch up, but they are still working out on the bump you just hit. That puts them all out of whack for the bump that's a few feet down the road. Like we said, a serious problem lurks here.

Riding the PE-250 at a very, very fast trail pace (like in a Two-Day trial) keeps you very busy. Too busy, in fact, if you're trying to keep up with your timekeeping and watching the route markers whizz by. In an event such as that, you need to have everything working as 'together' as possible so that you can concentrate on the job of riding long and hard.

The progressive rate springs in the front forks have too soft a rate of compression, allowing the forks to bottom out too easily. The springs from the RM would fit, but you'd probably find them TOO harsh for most enduro riders. Two Day riders would be well advised to make the change, though. Just about the only riders who will be able to live happily ever after with the springing that comes stock on the PE will be the riders who intend only to use the bike for nice calm Sunday rides or sitting down on the smooth fire roads.

By the same token, the rebound characteristics of the forks are just like the compression. They rebound too quickly, causing the bike to 'porpoise' down the trail from obstacle to obstacle. That's what causes you to get into trouble, when the suspension isn't keeping up with the forward motion of the motorcycle.

Same things for the rear gas Kayabas. The spring rates are too soft for the average rider and the compression and rebound strokes are too fast.

The whole handling of the machine is affected by the fact that when you hit something, the suspension reacts too slowly and takes too long to get back into normal shape and ready for the next jolt. It's not ideal suspension for very high speed riding. But for anything short of ISDT qualifier speeds, you're safe.

We had mixed emotions about the ratios of the gearbox. First is for starting off and for getting through really terrible terrain. Second will work at not much more than a 'plonking' pace, over and through rocks, water or whatever. We like having very low gears available on an enduro machine.

We also like having high top end gearing for getting it on when we get on a fireroad or straight stretch of trail. The PE has that capability too.

It's the middle gears, primarily 3rd and 4th that we're uncertain about. They don't fit 100 percent satisfactorily with the engine's power impulses at that mid-range speed. Third is high revving, fourth is bogging. Too much of a gap between the two. There's a point in there that we found ourselves in pretty frequently (in the desert) where we really needed a ratio halfway between third and fourth.

Then there are the little things . . . On every motorcycle, there are certain things that stand out in your mind after riding, or even scrutinizing the bike closely. We made a list of these items as they impressed us on the PE-250. These items, while admittedly fairly small and occasionally not all that earth-shattering in importance, are both

SUZUKI PE-250 SPECIFICATIONS

ENGINE

Engine type	2-stroke single
Bore and stroke, mm	67x70
Displacement, cc	247
Horsepower/rpm (claimed)	n.a.
Torque/rpm (claimed)	n.a.
Compression ratio	7.0:1
Air filtration	oiled foam
Carburetion	36mm Mikuni
Lubrication	pre-mix
Ignition	Suzuki CDI

DRIVETRAIN

Transmission	5-speed
Clutch type	wet, multi-plate
Primary drive	gear
Final drive ratio	chain

CHASSIS

Chassis type	single downtube
Overall length, in.	84.3
Seat height, in.	33.2
Ground clearance, in.	10.2
Wheelbase, in.	56.7
Weight as tested, lbs.	240
Tires, front	3.00 x 21 knobby
rear	4.50 x 18 knobby

NUMERICAL EVALUATION

Max. Points Poss.		
10	Starting	10
10	Power	10
10	Powerband	10
10	Transmission	
	(5) Ratios	5
	(5) Operation	5
10	Suspension	
	(5) Front	4
	(5) Rear	4
10	Brakes	
	(5) Effectiveness	4
	(5) Waterproofing	4
10	Handling	
	(5) Low-speed maneuverability	4
	(5) High-speed stability	3
10	Comfort	
	(5) Sitting	4
	(5) Standing	5
20	Miscellanea	
	(5) Quality of craftsmanship	5
	(5) Instrumentation	4
	(5) Electrics	5
	(5) Noise level	4
100 pts.	Overall Rating	90 pts.

good and bad.

Guess we must have been in an ornery mood, because the nit-picking little things we DIDN'T like outnumber the nice little features.

Here we go . . .

The hard plastic number plate: Does a great job of protecting the speedometer, but we think it should be made out of a more flexible material. Potential throat cutter there.

The speedometer is terribly inaccurate. Why can't Japanese technology build an accurate speedometer? And one that's really sturdy?

Axle adjusters and the rest of the rear wheel attaching 'system'. A bike that's being sold as an "ISDT" bike should have some system to make it easier to do tire changes. Look at Yamaha's quick removal system and Honda's easily removed brake cable, anchor arm and minimum of axle spacers and such. The PE has a setup just like the RM, which in turn is just about like a street bike. Several funny little spacers and stuff to fall all over the ground when you pull the tire out of the frame.

Footpegs are too small and the teeth aren't high enough. Same goes for the brake pedal. Fishing for the brake while trucking down a steep hill or very fast down a fire road got us into trouble a few times. This is one of our pet peeves; not being able to easily reach the brake pedal.

The chain tensioner is really good. We're impressed when we see adequate tensioners on production Japanese bikes. Not long ago, that was a real rarity. A lot of people made a lot of money building aftermarket chain tensioners for long travel Japanese go fast bikes.

Pressed steel skid plate is nice, but doesn't protect the fully exposed clutch actuating arm.

Shift lever is knurled steel. We like folding shift levers, but this one is nice enough.

Brakes are effective and more than adequate. Alloy rims appear pretty strong (we didn't wreck them in our favorite rock field). New IRC tires work good. Might try them on a European bike sometime.

Overall, the PE-250 is a pretty motorcycle. Looks business-like and functional, without an abundance of frills. Pretty serious motorcycle.

Even the points we complained about aren't 'terminal'. The potential is there to make a very good 'serious enduro' bike. We think so, so we've petitioned Suzuki to let us keep the test PE for a while to see how many serious off-road miles we can chalk up in a couple of months.

Huge (3.2-gallon) gas tank is tough steel, but why not plastic? Yamaha uses plastic on their IT models. Why can't Suzuki? Not a major point of contention.

Airbox is really waterproof! Sure wish they'd get rid of those cursed pull/push choke rods. Always have to buy a Webco accessory item to stick over it so we can pull the choke with gloves on.

Plastic gas cap and safety 'line' is nifty idea. So is larger-than-normal tank opening.

The lights stayed lit, for the duration of our crash-and-burn test. That's probably a first!

SUMMATION

We'd probably buy a PE-250. We've had Suzuki off-road machines before and their reliability is incredible. If the PE holds true to form (we're gonna see about that) it will be one durable motorcycle. Most of the points we were critical of can be fixed (except for the gear ratios) and it's all around, a bike that a guy can live with. We don't put the PE in the same class as a Bultaco Frontera or a Penton/KTM, but against the other Japanese serious enduro bikes, the PE-250 Suzuki will certainly hold its own.

And at $1450, it's a heck of a lot cheaper than a Penton or a Bul. Costs a little more than a Yamaha though, but go down to your local Yamaha dealer tomorrow and ask about an IT-250. Bet you he doesn't have one.

Bet you your Suzuki dealer has a bunch of PE-250s.

See you out on the trails!

. . . Tom Beesley ●