

SUZUKI'S PE250 ENDURO



DIRT BIKE TEST

PRELIMINARY EDIFICATION

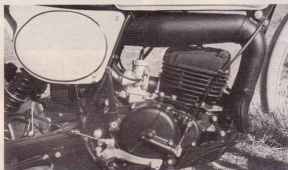
Hands down, no question about it at all, Suzuki's PE250 has got to be the most *arguable* bike that we've tested in quite some time.

Even before we'd actually seen the bike in the living yellow, rumors and first-hand reports from preferred persons (that is, anyone who'd copped a ride before we did) concerning the abilities (or lack of them) of Suzuki's first pukka enduro mount assailed us from all sides. We heard it was everything from an RM with lights to a TS without turn signals. We heard it was the new ultimate enduro/ET machine and we heard it was just another street/trail footer.

Regardless of how the PE falls within those parameters (you'll have to read the rest of the test for *that*), we can predict here and now, if you are an enduro rider, or an ET rider, or a serious trail rider, that you already have been, or will soon be, involved in, or will overhear, an argument about the merits of this machine.

Cross-country riders, it seems, are more *marque* loyal than are most other dirt riders. They have to be, as they spend greater time and distance on their bikes per ride and must depend upon those bikes not only to be competitive, but to bring their riders back from wherever they get to, usually spots far from the relative conveniences of truck or pit. It is a different sort of man/machine relationship that develops under these circumstances, and the loyalty

You've come a long way, baby!



The modified RM250B engine produces more low end at the expense of peak horsepower. A fair enough trade-out for enduro applications.

which this relationship develops is understandably fierce.

For the past few years there has been a clear-cut division between those people who rode "real" enduro machinery, bikes such as Ossas, Rokons, Penton/KTMs, Bultacos, Huskys *et al.*, and those who rode (and often did well upon) modified Japanese-made trailbikes.

Honda's MR series, Yamaha's IT400 (we as yet haven't tested their new IT series) and Hodaka's ED changed all that a bit. That is, these bikes blurred the distinctions a little, served to narrow the gap between the European, to use a simple, though not all-inclusive term, and Japanese machinery. Still, few riders would contend that, box-stock, any of the latter would equal the best of the former.

The reason that the PE250 will cause so many arguments is that it has taken another slice out of that gap. Whether it has merely narrowed it again, no small achievement, or closed it once and for all, will be the subject of the controversy, and is the subject of this test.

We all know by now, though, that there are no absolute answers.

PARTS ENCYCLOPEDIA

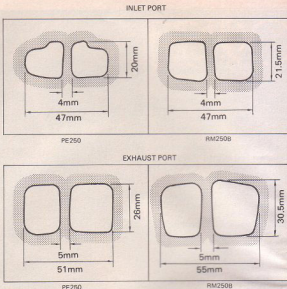
The PE is, in Suzuki's own words, "developed from the RM250B." It is not, however, an RM with lights. Such experiments have proved to be less than satisfactory for trail riding. The differences between Suzuki's motocrossers and their new enduro bike are considerably more extensive.

The PE's engine, for example, though basically the same unit that powers the RM, incorporates many changes. Though the bore and stroke remain the same as in the motocrosser, the head and ports have been modified in the interests of durability and greater torque output in the low- and mid-rpm ranges.

The cylinder head is tapped to accept a compression release, and head volume has been increased a total of 3.90cc, lowering the compression ratio to a milder 7.0:1.

Porting dimensions have been altered, as are the shapes of the intake and exhaust ports (see illustration). The crankcase is identical to the RM/B, save for some machining on the case wall where clearance problems had been noted relative to the RM's fifth driven gear.

A baffle plate has been added to



A safe, sane and unobtrusive taillight; it incorporates a brake light for street legality in some areas.



Though heavier than a Petty, Suzuki's headlight/number plate combination works well and provides protection for the speedometer.



The skid plate could be stronger, especially considering the somewhat inadequate ground clearance. Nothing broke, though.

the expansion chamber, as has an approved spark arrestor/silencer. While worlds quieter than the RM, this arrangement will still have some trouble meeting trail-legal noise regulations in certain areas, notably California and New England. Suzuki will soon offer, for a minimal price (under \$5, we hear), an accessory silencing kit. It was not

available at the time of this test, but will be commented upon in a later follow-up evaluation.

The carburetor is the same 36mm Mikuni found on the RM. Jetting changes, as indicated in the spec sheet, allow it to work with the more restrictive pipe and detuned engine of the PE250.

The total effect of these changes is



The approved spark arrestor/silencer reads out at about 91 db. Suzuki has a cheap accessory kit available to drop that level, presumably to 86 db.

a loss in peak horsepower and a corresponding gain in low- and mid-range tractability. Most riders will judge that, for trail riding purposes, the trade was well worth the making.

Though identical in geometry to that used on the RM250B, the PE's frame incorporates various brackets for mounting the enduro paraphernalia, as well as a new tailpiece ending in an above-the-fender grab loop, to aid in pulling the bike out of particularly difficult situations.

Swingarm design has been altered just enough to allow the fitting of an efficient chain tensioner.

Both shocks and forks are similar to those found on the motocrosser, but travel is less (by some 25mm at each end) and spring rates differ. Suspension on the PE is softer than that on the RM during the first portion of travel, and stiffer during the remainder.

The gas tank and filler neck are larger on the enduro model, for longer range and easier, quicker refueling, and the seat has had 16mm of padding trimmed off the top to allow for footing in rocks, stream crossings, etc.

Miscellaneous enduro gear, such as the speedometer, lights, switches, fork boots, etc., has been added to the basic package.

And that's about all. The above changes turn the fire-breathing RM into a motorcycle of a completely different character. How successful was the transformation? The only way to tell is to go riding.

PUTTING EARNESTLY

One-kick starting has become a magazine cliché. In truth, we don't doubt that on one or two occasions it might have taken us two, maybe even three, kicks to get the PE going, we honestly can't remember for sure. Suffice it to say that the bike was always an easy and reliable starter. The lower compression ratio lets a quick flick of the leg drive the starter through, with little danger of kickback and without the type of



Pegs are good, shifting easy, perhaps too easy.

effort that could dislodge a tired rider stalled on a hillside.

The exhaust note, once the bike is warmed up (and it is quite cold-blooded) is, for all of its 91 db, not offensive. Even the most noise-conscious members of our staff found the bike not offensive to be around. If Suzuki's silencing kit can truly reduce the sound to 86 db, it

will be pleasant indeed.

A few blips of the throttle indicate quick response and little flywheel inertia. Though the bike will torque, it is also a quick revver.

The PE snicks easily into gear, so easily, in fact, that you might inadvertently foot the lever again, just to be sure that it moved.

Under power the 250 pulls cleanly from the bottom, with little clutch slippage necessary for starting. The changes mentioned above, particularly those related to the powerplant, have given the PE a split powerband, with adequate low end to allow for sloppy shifting or tight plonking, and with top end sufficient for quick turn-to-turn and straightaway acceleration.

Gear ratios are spread with a wide gap between first and second. First is, essentially, for starting and mistakes, as second will pull through all but the tightest sections. Another wide gap separates fourth and fifth, fifth gear being almost an overdrive, valuable mostly for fireroads or pavement.

Power on the PE250 is not overwhelming, lacking as it does the rock-spraying jolt characteristic of the hotter enduro/ET bikes, but is more than sufficient to carry the rider cross-country at a deceptively high rate of speed. Few will want to go faster than the PE is capable of



going on any conceivable off-road terrain.

On hard baked, or sticky, good traction surfaces, the PE250 changes direction precisely and with little fuss. Though it will not recover from a deflection of the front wheel by itself as will some European machinery, it is not deflected from its course easily. There is, however, a slight tendency toward top-heaviness when the large gas tank is carrying a full load.

On cushioned or sandy surfaces

the front end will wander, and plow when forced too deep into a corner. This may well be a function of the front tire. It was not serious enough, however, to make us experiment with different rubber.

The rear tire, on the other hand, is excellent. It is a new design, made by IRC, that they call the "Vulcan-duro." The tire is of a wraparound design, formed from a soft compound. As is usually true of soft-rubber tires, it grips very well. Also predictably, it wears quickly.



Ours had lost all trace of leading edge after the first 100 miles of hard trailing. This is not meant as a complaint. Tires that find traction well wear quickly. A fact of life.

Rocks, from upper-gear-and-hold-it-on-and-bounce size to low-gear-pick-and-hunt boulders, do not faze the PE250. Its steering in rocks is precise enough to belie the hunting the bike does on softer surfaces. Ground clearance is the sole problem with the bike as far as rock riding goes. Unladen, the Suzuki

sports 10.2 inches of ground clearance. The weight of a rider decreases that, compression of suspension makes it marginal. Before long travel suspension, ten-plus inches seemed like a good bit. On the PE, however, it results in some clanking and banging as the bike makes its way over and through obstacles, and occasionally allows the rider's feet to become temporarily separated from the footpegs. Of course, while riding through rocks sizable enough to do this, most riders will be foot-

paddling anyway.

The PE250 has a fine set of brakes. Progressive, and with ample feel, they instill confidence in both downhill and cornering situations. Dunkings in mountain icewater caused them to lose effectiveness until they dried, as is the case with just about any binders.

That same water, however, never caused the bike to miss a single two-stroking beat. Waterproofing, at least on a serious level, is a rider responsibility. Stock, the PE seems to

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be as well waterproofed as any.

The suspension suspended. If allowing the bike to track stably over rocks, logs and whoop-de-dos, and otherwise going unnoticed, is the mark of good suspension, then the PE has it. Which is not to say that it can't be improved. We plan to work with it over the next few months. Many riders will, justifiably, not feel the need to change it, however.

In terms of a capsule description, the PE250 seems to *enjoy* itself on the trail. Rather than feeling sterile and competent, as do many of its motocross relatives, the PE feels playful and competent. Not at all a bad feeling.

PIECES, ETC.

Bitches, in the case of the PE250, are limited to a merciful few.

The shift lever, though it is quick and precise in changing gears, suffers from a too-light detent spring. It is easily nudged into another gear by an errant toe, especially when the going gets bumpy. We assume that the RM series uses a stiffer spring, and plan to investigate interchangeability as a

3.2-gallon aluminum gas tank should allow upwards of 80 miles before a pre-mix fill-up. The gas cap is secured by a small plastic strap, which prevents it from falling to the ground during filling.

The speedometer is well mounted, and protected by the large front number plate. Its odometer is, of course, resettable in tenths, and is easy to handle, even with gloves.

All of the lights were still lighting at the conclusion of our test. The taillight is a gem — small, securely mounted, and unlikely to ever cause pain.

Reliability is, as yet, an unknown. We plan to hold onto our test unit for the next six months. Next September's issue will tell the tale of what wore out and when. Present indications are that the PE will hold up very well.

PURE ENDURO?

Now to the question posed at the beginning of this test. Is the PE250 a new entry in the realm previously populated solely by European machinery, or is it merely another step in the right direction?



means of eliminating this problem.

Ground clearance could be greater, as said before. Raising the footpegs could conceivably go a ways toward alleviating the worst effects.

The seat is a bit firm, though not excessively so. The RM seat looks to be interchangeable. We plan to find out. If so, it might be a worthwhile swap-on-purchase item for riders tall enough to deal with the small difference in seat height it would entail.

Nice touches are all around. The

As we said before, there are no easy answers, but the fact that Suzuki plans to field a national enduro team, but not a two-day ET team, should provide a clue.

That the PE is the best Japanese-made enduro bike that we have tested to date is sure. It was the unanimous opinion of our testers. It cannot match, in horsepower and handling precision, the best of the European/American cross-country machines, however, and thus is not as yet a threat to the kings of that

SUZUKI PE250

Price (approx. retail, West Coast): \$1450
Engine Two-stroke single/air-cooled
Displacement 247cc
Bore & Stroke 67.0x70.0mm
Compression Ratio 7.0:1 corrected
Carburetor 36mm Mikuni VM single
Standard Jetting:

Main jet: #260, needle jet: Q-0, pilot jet: #40

Horsepower N/A

Clutch Wet, multi-plate

Primary Drive 2.727:1

Transmission Ratios:

1. 2.666:1

2. 1.750:1

3. 1.250:1

4. 0.913:1

5. 0.682:1

Final Drive 3.846:1

14-tooth countershaft

52-tooth rear sprocket

Electrical System Suzuki PEI

Lubrication Pre-mix

Recommended Fuel Premium

Recommended Oil Castrol R30

Fuel Capacity 12 liters (3.2 gallons)

Suspension:

Front: 19.5cm travel (7.75 inches)

Rear: 19.5cm travel (7.75 inches);

measured at the rear axle

Wheels & Spokes N/A

Tires:

Front: 3.00x21 IRC

Rear: 4.50x18 IRC

Dimensions:

Wheelbase 144.0cm (56.7 inches)

Clearance 26.0cm (10.2 inches)

Seat Height 86.0cm (34.75 inches)

Handlebar Width 79.0cm (31.75 inches)

Weight 109 kg (240 pounds)

44.1% on front wheel

55.9% on rear wheel

Brakes Internal expanding

Instruments:

Speedometer, tenths resettable

odometer

Lights:

Headlight, taillight, brake light

Silencer Yes

Spark Arrestor Yes, approved

Warranty None

Parts Prices:

Piston \$15.18

Rings \$13.64

Clutch cable \$6.57

Brake pedal \$6.57

hill.

Fact is, though, that it is an excellent enduro/trail bike, well worth, for many riders, the \$1450 price. Fact is, it is better, in every way imaginable, than the machines that most enduro and trail riders are riding.

Your ability might exceed that of the PE250. If it does, you're one hell of a rider. The only way to be sure is to try it yourself. If you do, be prepared to get into an argument.