PE250

Testing a bike such as the PE250 Suzuki is one of those experiences which one awaits with expectancy. Tesing an enduro bike somehow seems much less tedious and much more fun then the latest 500 road bike. There are no performaces figures to be taken, no braking tests to be done, just a long blast through your favourite piece of countryside along with the occassional stops for note taking, photos or a cigarette.

We originally were under the impression that the PE250 was to be a limited production effort similar to the IT400 Yamaha although it now seems that there will be shipments of the bikes arriving every month for quite some time. That's good news indeed for enduro and trail riders alike as the PE is a very impressive little piece of machinery.

Registering the PE may present a few problems as the little men in grey coats at Motoreg don't often exhibit understanding in matters such as these. Nevertheless, the trouble you may encounter whilst registering this machine will no doubt be miniscule in comparison to the fun you will reap for your efforts.

As we didn't have a serious enduro machine in the garage at the time of testing we did the next best thing, we ran the bike over the same terrain as we tested the It400 over. At least we'd be able to evaluate the how well the PE handled the going relative to the IT.

As you are probably aware the PE250 is a development of the RM250 motocross bike, which speaks highly for the machine even before riding it.

The PE is closely related to the RM250 which hasn't reached our land as yet. When Suzuki were building the RMB and PE250 they opted for a longer stroke than the RM250A configuration of 70mm x 64mm and 246cc.

The new dimensions are 67mm x 70mm with a capacity of 247cc. The PE has consequently benefited from the race development and technology drawn from World Grand prix events.

The exhaust pipe on the RM250B is identical to that of the PE250 except for an internal baffle and a different spark arrestor. The new exhaust has a slightly larger stinger, another sign of lower, more usuable power.

The cylinder head is not interchangeable with the RM250B as it has a different combstion chamber shape and naturally provision for a dcompressor The chamber volume has been enlarged slightly from that of the RM250B giving a corrected compression ratio of 7:1.

Likewise the barrel is different to the motocross version. Suzuki have dropped the inlet by 4.5mm, transfer by 1mm and lifted the inlet by 7mm to give a lower more usuable power spread. Port shapes have also changed with the bridged inlet being 1.5mm shallower and slightly stepped whilst the exhaust is 4.5mm shallower and 4mm narrower.

For camparison port timings are:

	PE250	RM250B
INTAKE	131 deg.	148 deg.
EXHAUST	170 deg.	184 deg.
TRANS	117 deg.	122 deg.

With these changes the PE still develops twenty eight wholesome horse-power and lots of lb down trench digging power.

With these changes in the horsepower department, Suzuki have also changed "how much power and when" cog department to suit the enduro rides needs.

The PE's geabox measures up as

	PE	RM
1st.	2.666 (32 driving 12)	2.076 (27 driving 13)
2nd	1.750 (28 - 16)	1.750 (28 - 1
3rd	1.250 (25 - 20)	1.352 (23 - 17)
4th	0.913 (21 - 23)	1.105 (21 - 19)
5th	0.692 (18 - 26)	0.913 (21 - 23)

The air box and air cleaner arrangement is also different on the PE with conservation laws in mind and coupled with the quieter exhaust the noise output is 110 dbA. The exhaust noise could do with being a little quieter as it wouldn't be hard to term the note offensive particularly in the ears of a policeman or conservationist.

The intake system on the PE features identical reed and carburetor except fo carb. internals. The Suzuki RM runs a 300 main jet, a 1.5 cutaway and a 45 pilot jet. The PE not making quite as much power as the RM uses a 260 main jet and being more efficient at the low end doesn't require as much richness of mixture, running a 35 pilot jet, and a 2.5 cutaway. Both carbies are 36mm Mikuni slide types with spigot mounts.

Crankcases are almost identical on the RM250B and the PE250 with one exception. The extra lage fifth gear on the PE required machining a larger clearance in the cases. This means that you could use PE crankcases on your RM but not RM crankcases on the PE. The clutch and associated mechanisms are identical and interchangeable between the models.

The left hand flywheel is larger on the PE

due to the extra electrical gear required on that mach.

The frames on both bikes are identical except for differentmounting brackets for the fittings. The swing arm on both bikes is now a box sectioned pressed metal affair compared with the RM250A's tubular construction. Swing arms are similarly identical except for fittings, the RM having a chain guide, the PE having a chain tensioner.

The tank on the PE is naturally larger than that of the RM although for some long trail rides we can think of, it may not hold sufficient. Suzuki would have been wise to follow Yamaha's lead in fitting a large plastic tank. The PE tank holds just on 12 litres of premix. The PE's seat is lower, flatter and squarer than the RM's.

The suspension was revamped on the PE to make it more suitable for enduro work. Both ends have less travel than the RM250B. The front and rear travel is 195mm both ends compare with 220mm both ends on the RM250B. On both models the rear unit has been brought closer to the pivot to give more movement.

It is not surprising that with all the thought, development and technlogy that have gone into the PE, Suzuki have come up with a gem of an enduro bike.

In the most recent ISDT, the most gruelling enduro event in the world there were three PE's entered. All finished without mishap or mechanical failure which in itself is a tribute to Suzuki's first enduro bike. Notwithstanding Suzuki finished with three GOLD MEDALS!Suzuki have developed in their first effort a brillinatly indestructable dirt bike.

It would be difficult to justify claims of the PE being fragile such as those which have been levelled at the IT400.

When we took the PE out we took the new monoshock Yamaha cantilever enduro 250 along as well, more for transport than comparison reasons.

First impressions upon riding the PE were that the first gear was very low however it must be remembered that a low first gear is necessary for the real slow hills the tight terrain encountered in enduros. Second and third gears are the most used gears whilst the top two cogs would only occassionaly be used in really open country.

Suspension appears to be left over from the A model RM250. Forks and damper units have the same travel as the A model so it would reason that Suzuki will eventually change over to B model suspension when all the A model stuff is used up. Suspension is excellent and could not be faulted throughout the test.

Motorwise, the PE had a gear for every situation and consequently useable power under any condition. The motor still demands to be buzzed and not plonked but then again it's not a trials machine and the extra low first gives plenty of come on when needed in the slow stuff.

On our treks through the hills we came across an unused flat gravel-sprinkled dirt road, We were soon doing our flat track stuff just like Kenny Roberts and loving it. The PE would negotiate corners of almost any desription, from sweepers right through to hairpins, with the back cocked out and the power on. The PE felt just like an RM in fact (well glory be!) although the power was in different places.

One facet of the bike which really got to us was the brakes. The Yamaha 250 we were riding had a Yamaha rear brake (nuff said) and a pretty good front brake. On steep hill descents the Yamaha rear brake locked repeatedly however the Suzuki was perfectly controlable under any condition. Such feel was most extraordinary. On gravel roads we expected to reun out of brakees quite quickly, but this was not the case.

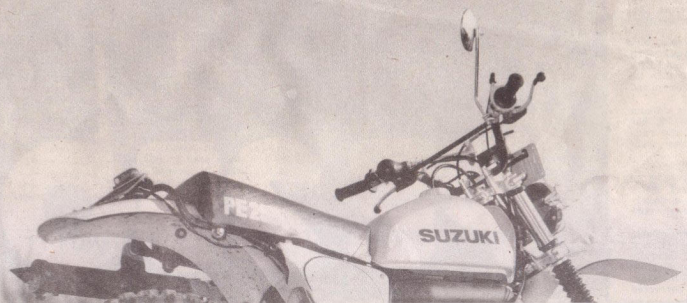
Only after a three mile dirt track blast on the gravel did the front brake start to fade and need adjusting. The rear never need a thought.

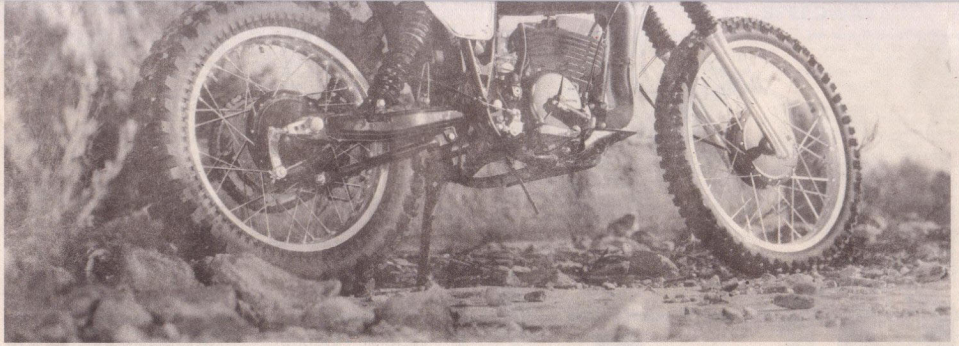
The rear tyre was needed to get the power to the ground and it certainly is a big one, 450 x 18.

Suzuki have delved into an area dominated for years by the top European brands, some of which spend their all their development working on machines such as this, and have come up with a machine which is very, very competitive. It's not cheap by trail bike standards, but it's not a trail bike, it's a competition machine through and through yet it has thoroughbred temperament and habits.

Costing around $1200 in Victoria and $1300 elsewhere, in Australia, the PE250 will be a big seller despite registration problems.

Well done Suzuki.





SPECIFICATION

Overall length	2,140mm (84.3 in)
Overall width	855mm (33.7 in)
Overall height	1,270mm (50.0 in)
Wheel base	1,440mm (56.7 in)
Ground clearance	260mm (10.2 in)
Weight (Dry)	109 kg (240 lbs)

PERFORMANCE

Max. horsepower	28 HP at 8,000 rpm
Max. torque	2.78 kg-m (20.1 lb-ft) at 6,500 rpm

ENGINE

Type	Two-Stroke cycle air-cooled
Intake system	Piston and reed valve
Bore x Stroke	67 x 70mm (2.64 x 2.76 in)
Piston displacement	247 cc (15.1 cu. in)
Corrected compression	7.0:1
Carburetor	Mikuni VM36SS
Air cleaner	Polyurethane foam element
Starter system	Primary kick
Lubrication system	Fuel-oil premixture of 20:1

TRANSMISSION SYSTEM

Clutch	Wet Multi-Plate
Transmission	5 speed constant mesh
Gearshift pattern	1-Down-4-Up
Primary reduction	2.727 (60-22)
Final reduction	3.846 (50-13)
Gear ratios, 1st	2.666 (32-12)
2nd	1.750 (28-16)
3rd	1.250 (25-20)
4th	0.913 (21-23)
5th	0.692 (18-26)

CHASSIS

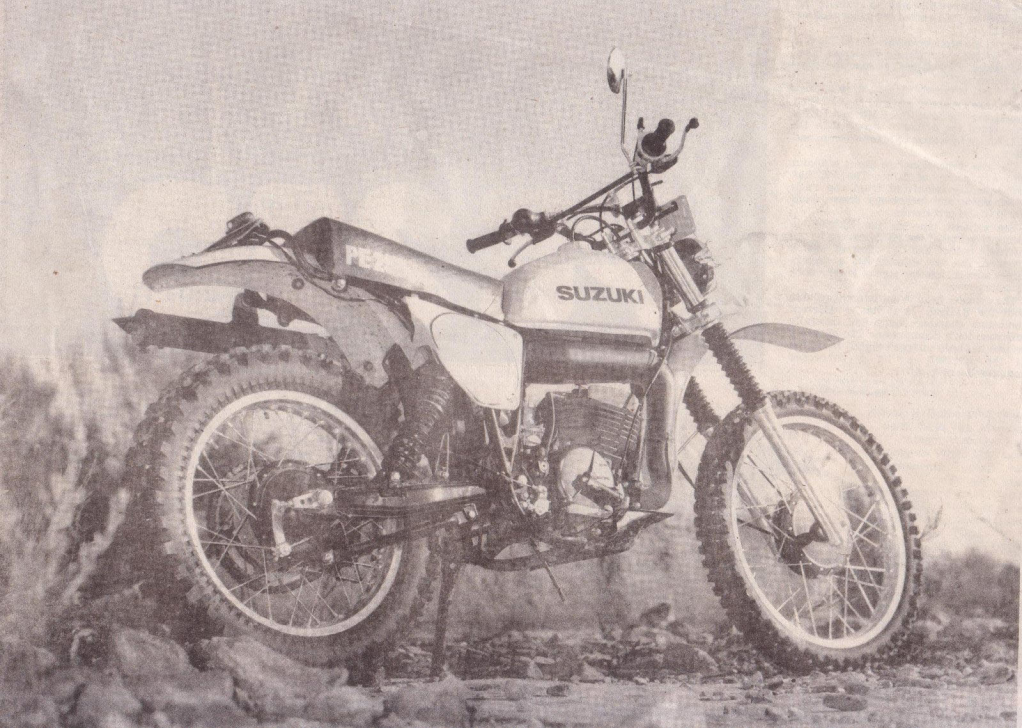
Front suspension	Telescopic, oil dampened
Rear suspension	Swinging arm, gas-oil dampened
Steering angle	50 per cent (right and left)
Caster	60 per cent 25
Trail	125mm (4.96 in)
Turning radius	2.2m (7.2 ft)
Front brake	Internal expanding
Rear brake	Internal expanding
Front tyre size	3.00 — 21 — 4PR
Rear tyre size	4.50 — 18 — 4PR

ELECTRICAL SYSTEM

Ignition type	Suzuki "Pei" (Pointless electronic ignition
Spark plug	NGK B-8EV
Ignition timing	23 per cent B.T.D.C. at 6,000 rpm

CAPACITIES

Fuel tank	12 lit. (3.2-2.6 US-Imp Gal)
Transmission oil	900cc (1.90-1.58 US-Imp Pt)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