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NEWS FLASH

After four gruelling days at the Australian Enduro Championships, winner*, John Hand really appreciated the comfort of his Lazer helmet.

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DIRT BIKE TESTS



HONDA XL500RC vs XT550J: Thumpers to Cape York!

YAMAHA XT200J vs HONDA XR200: Two-strokes beware!

SUZUKI DR250 and HONDA XL250R: Market leaders analysed.

KAWASAKI KDX175 and KLX250B2: Big Green's dirt runners.

YAMAHA IT250J and SUZUKI PE175: Enduro-winners both.



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Bruce Allard

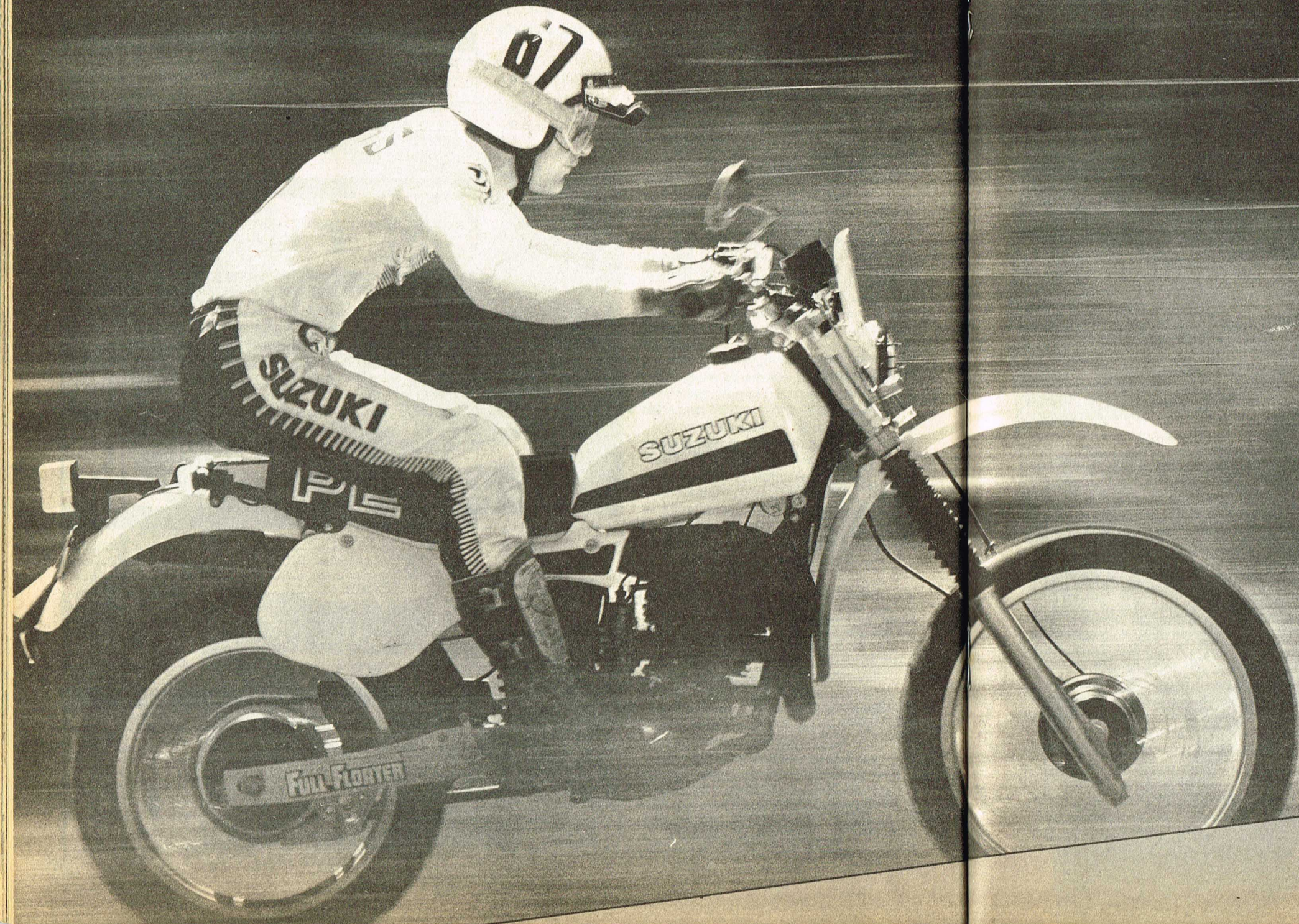
By the editors of
TWO WHEELS Magazine.
ARTIST — John Taylor

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Dirt Test

Suzuki's PE175 has long been the pace-setter in its capacity bracket, the most fiercely-contested for production enduro bikes. The Full-Floatered PE175Z is still at the head of the pack.

'Catch-Us-If-You-Can'



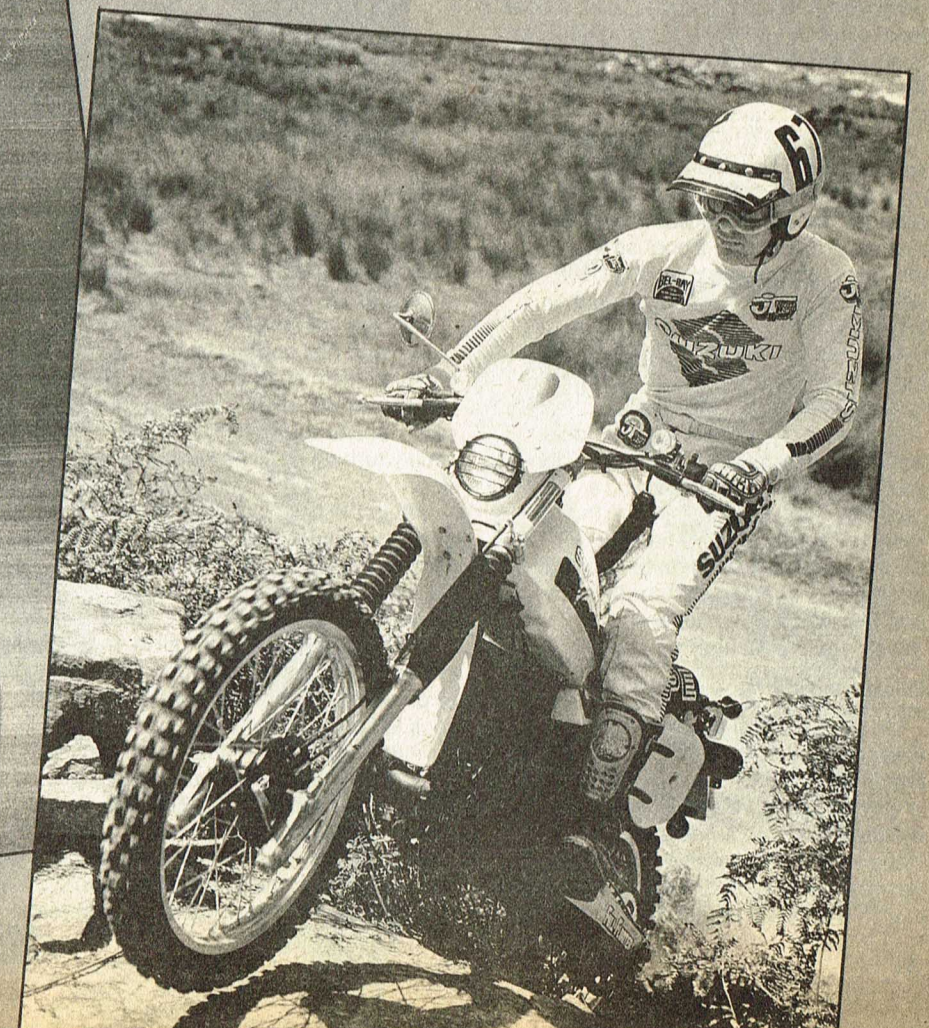
WHEN Suzuki introduced the PE175 some five years ago, the bike was the first of what was to become a trend from the Japanese factories — a competent, purpose-built, motocross-derived enduro mount which was capable of pulling medals at any one, two, four or six-day event, yet came at an affordable price. Previous "enduro" offerings from the East were more in the range of dual-purpose trail bikes. If you wanted to get serious in enduro competition, you had two equally-expensive choices: go for one of the specialist European models which dominated this sector of the market, or upgrade your Japanese trail bike with performance accessories. The first PE175 quickly established itself as the most popular enduro model to come out of Japan, prompted top-class 175 cm³ offerings from Kawasaki and Yamaha, and set the capacity bracket up as the one which was the first with new technology at each model change. True to this approach, the PE175Z is the first of Suzuki's enduros to get the Full Floater suspension treatment. But the company has adopted a stance with the PE range which is at odds with the technical advances pumped in, and this

is to make very few changes to the bikes' looks with each successive model. With the visible plastic components and colour schemes varying only in detail, the PE175 might fool people into thinking it was nearly the same bike as five years ago. In reality, the Z model is in every respect as much a new-generation dirt-digger as the motocross models from which it is derived.

No Star Wars looks

In a side-by-side comparison with the other Japanese 175s, the PE does not quite have their Star Wars appeal. Instead it borders on the old European theme of simple and uncomplicated function. The PE is tidy — and it performs. The very plush and effective suspension allows the PE175Z to be raced competitively and ridden hard under any conditions. Unfortunately for some, to reveal the full extent of its ability the new Suzuki is best ridden just that way — hard.

It is a pity that Suzuki chose to leave the graphics of the new PE175Z looking very much like the previous models, because in fact it is a vastly different machine. A growing trend is to make enduro bikes very much like motocrossers and to graft many of the



successful motocross features straight onto the enduro machines. The PE175Z follows this trend, and shares more of the RM's components this year than it has ever done before. All up, the number of changes wrought to the Z model make it difficult to find parts it shares with last year's PE175.

The Full Floater suspension, front forks, airbox, and straight-pull spoke wheel hubs come right off the RM. Other changes such as the porting, new expansion chamber, sideplates and mudguards, dog-leg control levers, and folding gear change and brake lever tips are exclusive to the new PE, and are all the 175Z needed to stay in the enduro fashion race. Even the seat has been changed, leaving the fuel tank and the bottom end of the engine the only major components left over from last year.

Despite the Z using last year's bottom end, the great number of porting and pipe changes make it very different to ride. The new engine could best be described as a screamer. As a result of the porting changes and a very rich mid-range jetting, the PE runs best wide open. It has a little less bottom end than before, about the same strong mid-range, and more top end than ever. As a result, a motocross rider would set the trails alight and feel right at home. The more passive rider won't necessarily be disadvantaged because the bike does have sufficient power and good gearing to allow it to be taken anywhere. It's just that it feels more in its element when ridden with a heavy wrist.

We found the rich mid-range jetting to be a significant problem on both the road and the dirt. The main problem arises when attacking twisty sections or racing up steep hills. Because the mixture is rich on the needle jet, the PE has a tendency to hesitate while the engine tries to unload some of the excess fuel. When it does get on the mainjet, it picks up considerably and lurches ahead.

There are three ways you can deal with the problem: Decide that you don't ride hard enough to consider it a problem, and live with it; adopt the motocross trait of using handfuls of throttle and fan the clutch to keep the PE on the pipe; or thirdly, experiment by first lowering the needle and, if necessary, try a leaner needle jet.

Road work a hassle, too

On the road, the problem is even less tolerable. Because the PE is geared for the dirt, top speed is around 90 km/h. It is only natural for a small-bore machine like the PE to lose some speed on a steep incline, but because of the jetting, the effect is amplified. Instead of losing say 15 km/h, the engine falls back into



this rich band of carburation and leaves you with no choice but to change down a gear or two. With proper jetting, we can't see the PE losing as much speed on hills as we experienced.

Jetting aside, the PE delivers enough punch and has gearing low enough to get even the most inexperienced rider up most tricky climbs. Any rider finding first gear not enough to pull him up a hill is simply turning the throttle the wrong way.

Lifting the front wheel in the first three gears to clear obstacles or to show off is fairly easy once you learn to locate the PE's power. Ground clearance is certainly not a problem, but the factory has tucked all the levers well in and welded enough tubing under the motor to prevent any damage from trees or rock ledges.

The suspension on the PE is nothing short of superb. The new Full Floater rising rate system on the RMs has proven to be the best rear end suspension on the market. We feel the same applies to the 175 enduro, even though the shock absorbers are different

from those found on the motocross bikes. The promotional blurb we got for the bike suggested it had a similar shock with remote reservoir. Not so. The shock body on the PE is about the same size as the small unit found on the RM125Z, but definitely without a remote reservoir. We would like to see one next year, as the damping can be felt to fade marginally after a while on very fast fire trails. The same would apply to desert racing.

Thanks to the rising rate springing of the Full Floater system, you get both a plush ride over the smaller bumps and enough firmness to handle heavy bumps and ruts. The other good news about the PE's back end is that — like the RM — its behaviour is very forgiving. Hitting rocks and holes at odd angles does not kick the back end up suddenly or pitch the machine to one side. Riders who like to sit down a lot when they ride will love the suspension on the PE.

The front forks are the same Kayaba units you will find on the RM125 and offer a very compliant ride, which complements the back end. Standard oil levels in the forks with no air assist should prove fine for most riders, as will standard preload on the rear shock.

Steering faultless

We couldn't fault the steering on the PE. On hard ground or in sand or mud, we found that the bike steered predictably without any shaking or washout. The Bridgestone tyres with the rimsaver bead are about the best to come out of Japan for trail bikes, and no doubt helped the front end go where we pointed it.

Another feature taken straight off the RMs is the adoption of straight-pull wheel hubs which require very little attention and maintenance right off the showroom floor. With this feature and the Bridgestone rimsaver tyres, it is hard to imagine anyone having a problem with bent rims or broken spokes. However, when you pick up your PE, you are going to have to buy a spoke wrench as well. All Suzuki offers with the bike are two multi-purpose tools which clip onto the front number plate mount. These two tools will perform most jobs, but you still require a spoke wrench, Phillips-head screwdriver and a pair of pliers. For this reason we would have liked to see a vinyl pouch mounted behind the seat in the same manner as other Japanese enduro bikes.

Suzuki's quick-change rear wheel with the cushion-drive rear hub is an excellent addition to a machine of this sort. We couldn't see a reason to change it last year and can't think of one

now. Using the multi-tool, even the clumsiest rider can whip the rear wheel off in less than a minute, leaving the rear sprocket and brake assembly attached to the left side of the swinging arm.

It is good to see Suzuki finally update its choice of controls. Last year, Suzuki was the only factory not to use dog-leg hand levers and folding foot controls. For the current PE we find comfortable dog-leg levers and folding shifter and rear brake arms. The only thing that lets the show down is that, unlike the RMs, the handlebar lever mounts are not two-piece units which can be removed without taking off the throttle or hand grip. Perhaps it was too much to expect in one year.

The rest of the controls except the mirror work well and are easily reached while riding. The mirror we found on the test bike was cheesy. It never stayed in place and finally fell off, while we were riding. We heard of one falling off from the water pressure of a garden hose, so ours probably wasn't an isolated case. The ideal unit would be a stronger one mounted on a shorter arm to prevent it being clipped by branches or crushed in a fall.

Design Rules rule, OK?

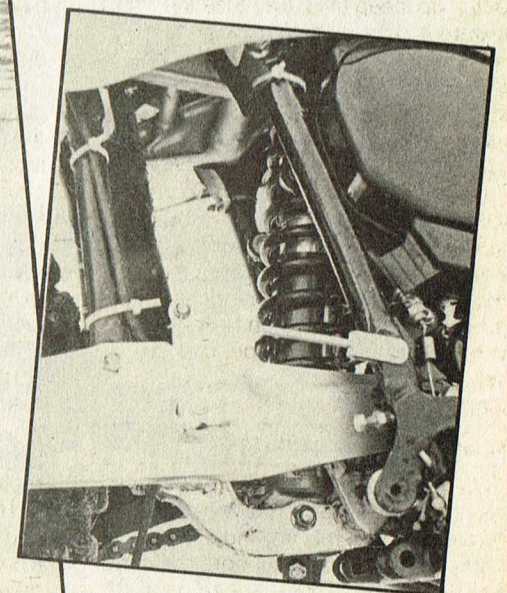
Getting many enduro bikes registered has been a problem due to Australia's strict design rules. PE owners will not

have a problem as Suzuki has gone all out to comply. One of the moves has been to replace the small rubber-mounted taillight of old with a large square unit. This light may not only be a threat to one's reputation, but also can be easily broken in the lightest of falls. The blinkers are much less obtrusive and breakage-prone, and can be removed in a few minutes to cut down on weight and repair bills.

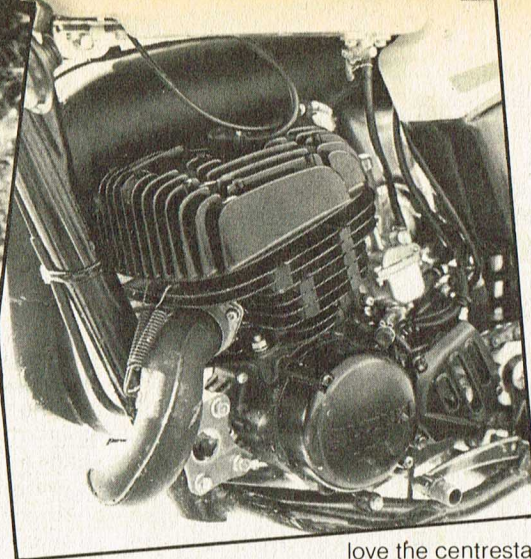
While on the subject of ADRs, a few riders we came across during the test were interested in modifying their PE silencers to improve engine performance. We do know of several riders who have cut the round tip off the silencer end and cut open the plug of the perforated inner sleeve. If you don't know what you are doing, you could easily ruin your silencer. A better move would be to invest in an accessory unit with a spark arrestor.

Maintenance of the PE is very easy, with few areas needing attention. One word of advice — strip down the rear suspension unit before much riding is done to ensure the pivot points are well greased. The central bellcrank is an aluminium arm which uses roller bearings. Should someone in the factory have slapped your bike together quickly, you will soon be up for a great deal of expense and aggravation. Ideally, Suzuki will follow Yamaha and Honda's example and mount grease nipples to the D models. Once well greased, the back end should be good for at least six months.

With the straight-pull spoked wheels, the only maintenance worth talking about is adjusting the chain, cleaning the air filter, and changing the gearbox



Simple good looks mask the PE's high-tech appointments (left). Spring/damper unit for the rear (above) works well.



Quality ancillaries like dogleg levers and side-pull throttle make the life of a PE rider easier (far left). Note the "tool kit" clipped to the right fork stanchion. It works well, but a spoke wrench is also needed. The 175 cm³ mill (left) is an honest performer, responds well to carburation fine-tuning.

oil. All these things can be completed in an hour, making the PE an ideal machine for those who require a high performance trail bike with a low maintenance program.

We recommend you use Bel-Ray light viscosity or Castrolite oil in the gearbox of the PE, as thicker oils tended to result in clutch slippage and a few false neutrals. Bel-Ray LV gave us good clean shifts and reduced the number of false neutrals we encountered earlier.

Out of the crate, the PE175Z offers better performance and handling than we have found from a Japanese enduro bike. There is no doubting the Japanese

mean business. Setting the PE up for serious competition simply involves a few jetting changes, the removal of blinkers and taillight, and a change of tyres if you are fussy about your rubber.

One optional item available from Suzuki which we feel is worthwhile is a centrestand. On the crossbar under the swinging arm pivot are two pairs of tabs for mounting this centrestand. You either love them or hate them. If you hate carting around a petrol drum in case you want to remove either wheel, then you'll

love the centrestand.

The outstanding good point about the PE175Z is its suspension. Without any doubt, it is the best. Because we find it a lot easier to live with a rich-running motor, or to do a little bit of jetting rather than invest a lot of time and money into getting a lesser suspension to work better, we would pick the PE above its competition as best value for money. And while it is best suited to a person who likes to ride his bikes hard and fast, just because you're a slower rider doesn't mean you need a slower bike.

— D. E.



Suzuki PE 175Z

ENGINE

Single-cylinder air-cooled two-stroke; power reed induction, piston-controlled porting. Built-up full circle flywheel crank, supported on two ball bearings. Caged needle roller bearings on big and little end.

Claimed power	N/A
Claimed torque	N/A
Bore x stroke	62 x 57 mm
Displacement	172 cm ³
Compression ratio	7.9:1
Carburation	Mikuni VM34SS
Air filter	Twin oiled foam element
Ignition	CDI magneto
Lubrication	Petrol mix

TRANSMISSION

Gear primary drive through wet, multiplate clutch to six-speed, constant mesh gearbox. Final drive by 520 roller chain.

Ratios (overall: 1)

First	34.14
Second	24.46
Third	18.20
Fourth	14.36
Fifth	11.54
Sixth	9.67
Primary reduction	2.762:1 (58/21)
Secondary reduction	4.000:1 (48/12)

FRAME AND BRAKES

Welded tubular chrome moly steel frame. Single front down tube, double engine cradle. Box section swinging arm. Oil-damped coil spring telescopic forks, air assisted. Rear suspension by single gas/oil spring/damper unit and Suzuki Full Floater linkage system. Single leading shoe drum brakes front and rear.

Front suspension travel	260 mm
Rear suspension travel	270 mm
Fork rake	62 degrees
Front wheel trail	113 mm
Front brake diameter	130 mm
Rear brake diameter	130 mm
Front tyre	3.00 x 21 Bridgestone
Rear tyre	4.10 x 18 Bridgestone

DIMENSIONS

Dry weight	104 kg
Seat height (bike unladen)	925 mm
Wheelbase	1350 mm
Ground clearance	305 mm
Footpeg height	360 mm
Fuel capacity (incl. reserve)	10.6 litres

EQUIPMENT

Footpegs	Cleated steel, spring loaded
Controls	Blinkers, lights, horn, speedometer
Kill button	Yes
Guards	Plastic front and rear
Tank	Plastic
Toolkit	Two-piece multi-tool
Throttle	Plastic side-pull type

TEST MACHINE

Manufacturer	Suzuki Motor Corporation, Hamamatsu, Japan
Test machine	Suzuki Australia, Camellia, NSW
Price	\$1600

SUMMARY

	Poor	Below Average	Average	Above Average	Outstanding
RATINGS					
ENGINE					
Responsiveness				●	
Smoothness			●		
Low rev power				●	
Midrange power		●			
Top end power				●	
Starting					●
Quietness				●	
TRANSMISSION					
Clutch				●	
Gearbox operation			●		
Ratio suitability				●	
SUSPENSION					
Front travel				●	
Rear travel				●	
Front operation					●
Rear operation					●
Front/Rear match					●
RIDING					
Steering — soft ground tracks				●	
Steering — hard ground tracks				●	
Brakes overall		●			
Ability to slide				●	
Stability on jumps				●	
Stability and predictability overall					●
Slow, tight radius turns				●	
Medium, variable radius turns			●		
Fast, wide radius turns			●		
Ease of riding in mud conditions				●	
In sand conditions				●	
Manoeuvrability overall				●	
Ability to forgive rider error					●
Hill climbing			●		
Competition suitability					●
GENERAL					
Riding position				●	
Wheel changing					●
Ride comfort				●	
Tyres			●		
Location of controls			●		
Quality of finish			●		
Mechanical access			●		
Overall design				●	
VALUE FOR MONEY					
					●

Best points: Full Floater suspension and Kayaba front forks give the PE175 best suspension available. Straight-pull spokes are maintenance free; all service points easily accessible; light weight. Best standard tyres out of Japan; excellent quick change rear wheel; optional centre stand.

Worst points: Poor quality brake shoe linings for a competition machine. Very rich mid-range jetting stifles engine potential; gearbox prone to the odd false neutral. Very large rear tail/stop light easily damaged; no tool/spare parts pouch supplied.