

THE SUZUKI PEs

SUZUKI PE175T

It's Special Test Ready, But Is It Right For You?

Suzuki was faced with a dilemma while engineering the PEs this year. Since the improvements in their prototypes directly reflected the success of the American enduro team, many of the changes found necessary by the team's professional riders would limit the PEs' playbike appeal and direct the machine toward a smaller market of "expert" caliber riders. To sidestep this problem, Suzuki introduced an entirely new line of "RS" series machines for the serious playbiker and freed the R&D boys to incorporate into the PE those changes deemed essential to its competitive evolution.

Compared to the somewhat stagnant development of the PE175 since its introduction, the new T-model's update seems like a complete redesign. Suzuki engineers chose this year's RM125 single-downtube frame because of its beefier steering stem and superior rigidity. They covered the new steering head's tapered roller bearings with a rubber seal to protect them from trail grunge and fitted a set of hefty alloy offset triple clamps. An aluminum box-section swingarm pivoting on needle bearings replaced the old oval-section mild-steel unit. Then they added the pieces essential to outfit the frame for enduro use. First came a rear frame loop to support the extra-long round-profile fender. Next an aluminum bashplate replaced the old mild-steel unit and higher, cleated footpegs supplanted last year's pegs which tended to droop either from the rider's weight or because they had snagged a rock from their low position. The new pegs are a full inch higher. One thing that will still etch trailside rocks is the bolt-on motocross sidestand which hangs way out in the breeze, farther even than the footpegs.

Next on the list of improvements was suspension that would provide a

plush ride for all-day competition and enough travel to blast through really nasty special tests—all without raising seat height to a teetering level. The engineers chose hardware from the RM125 and modified valving and spring rates to fit the enduro format. In front 36mm-Kayaba forks sport air-assisted springing and 9.89 inches of travel, up .79 inch over last year. In back the 15.5-inch Kayaba gas-charged shocks bumped wheel travel up from 7.9 inches to 9.7 inches—nearly two inches—yet the PE's seat height only went up one inch. To help compensate for the added height, a narrower seat gives the rid-

er a little easier reach with his legs. Our 5-foot-11-inch testers had no problem planting both feet on the ground. Although the PE's suspension offered a plush ride without bottoming frequently, the rear shocks weren't as responsive to sharp bumps as the forks. They don't feature the RM's remote reservoirs, but they do have tall urethane bumpers to cushion the last inch of travel and three-way adjustable preload for the dual-rate springs. However they lack the versatile damping adjustment of the Yamaha IT175's monoshock. Although they were adequate for our 150-pound testers, riders who weigh more or intend to compete seriously may want accessory units.

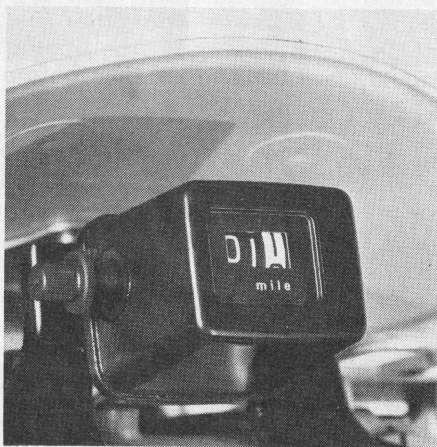
Since the PE175's engine was originally designed around the RM125, Suzuki had little trouble sliding it into the latest frame. However because of a swingarm pivot closer to the countershaft's axis, the rear portion of the crankcases had to be sculpted slightly to provide enough clearance.

The enduro team riders found that their 175s had no trouble keeping up with their competitors in tight sections, but some of the other machines, the SWMs in particular, would leave them in the dust on the open trails. To produce more top-end power, the PE's transfer ports now have six separate channels, all with their own port openings as opposed to last year's two sets of bridged ports. A 34mm Mikuni carb replaces





All three PEs share the same plastic headlight housing, numberplate and combination tools. Removal of both the front and rear wheels, plus the spark plug and any 12mm nut or bolt of your choice can be accomplished with these clever tools. Unfortunately they're made of putty-soft scrap metal that deforms long before it loosens tight nuts and bolts.



A rectangular odometer is rubber mounted to sturdy metal brackets and tucked out of harm's way behind the numberplate. The reset knob is large enough to zero the big numbers with gloved hands, but only rotates the digits by tenths. You had better be able to get to checkpoints ahead of schedule, otherwise you will likely spend precious minutes resetting.

the N-model's 32mm mixer and the case-reed's butterfly stopping plate is now perforated to provide excess fuel mist an avenue of escape, allowing the reed petals to open faster. Extra baffles in an RM125N exhaust system satisfy government sound standards. Finally, the right crankshaft seal now mounts outboard of the main bearing for easier access and to separate the bearing from the thick transmission oil which used to lubricate it causing considerable drag. The bearing is now lubed by the gas/oil mixture in the crankcase.

These changes did manage to boost horsepower on the Webco dyno to 22.38 at 9000 rpm. That is

more than the IT's 19.61 and the KDX's 19.26, but there are drawbacks. This high-spinning, desert-strafting potency was achieved at the expense of low- and mid-range power. The PE lags behind the other Oriental enduros throughout the low-range and is actually 1.45 hp down on last year's N-model at 6000 rpm. In comparison to the IT, this deficiency is compounded by the fact that the PE weighs 14 pounds more than the Yamaha. The PE's newly found power has also cut its mileage to 20 mpg (8.6 miles less than the KDX175) and with a smaller 2.8-gallon tank, has shortened its range to 56 miles.

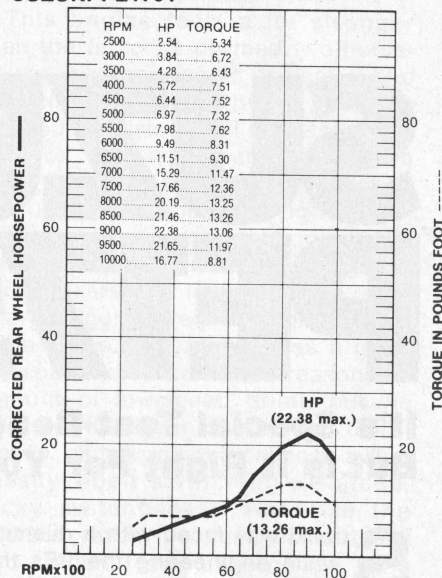
When the PE revs to 8000 rpm, it really begins to flex its powerful muscles. However anyone less than a top-notch enduro rider may have trouble extracting the PE's full power on terrain other than a straight road. It takes a fast boot and lots of concentration to select the right gear, and some serious clutch abuse to keep the motor spinning in certain situations. But even though the clutch was feathered extensively throughout the test, it never showed signs of fatigue.

Besides its precise steering and motocross-like handling characteristics, the PE's finest quality has to be its superb brakes. A full-width hub replaces last year's conical unit and supplies a precise feel. The PE175 shares the same quick-change rear wheel design and brake set-up as the grown-up PEs, but isn't prone to hopping under hard braking.

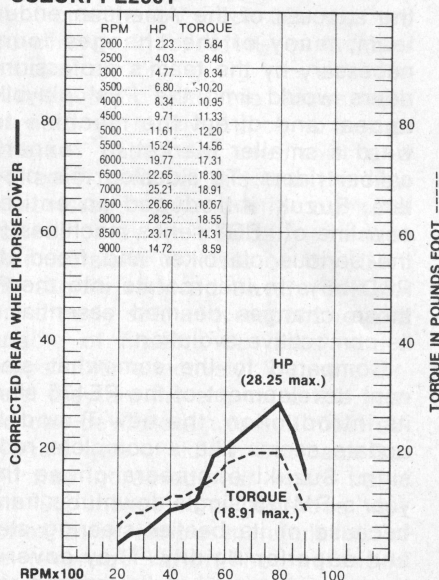
One problem magnified by the explosive powerband was Suzuki's choice of a rear tire. The 21-inch Bridgestone motocross tire up front is acceptable as an all-terrain tire, but the rear tire only worked well in soft, loamy conditions. On hard-pack surfaces, it would slide around like a sauteed oyster every time the power cut in hard. On one slippery uphill section that required a full-goose assault, we used the entire 10-foot wide trail and more than one man's share of adrenalin while cutting a sidewinder path to the top.

The power characteristics are what distinguish the PE175T from your basic playbike. Although the chassis is fully capable of handling the consistently fast pace required to reach the PE's potential, it still requires hard work. Its wide-open riding demands are not what most weekend riders consider fun. But if you're a serious competitor willing to ride the PE175 at mess-in-the-pants speeds, you might be able to make the narrow, but potent, powerband work for you. If you fall into the B-rider category, we suggest you look elsewhere. The PE175 is for very capable riders only.

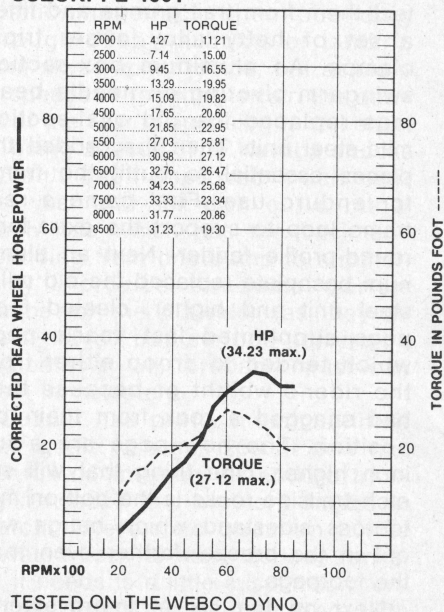
SUZUKI PE175T



SUZUKI PE250T



SUZUKI PE 400T

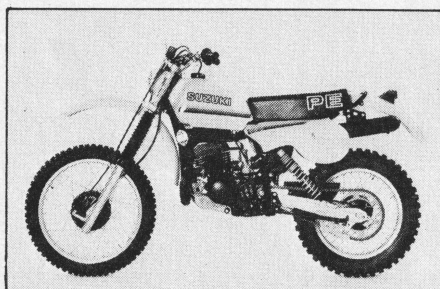


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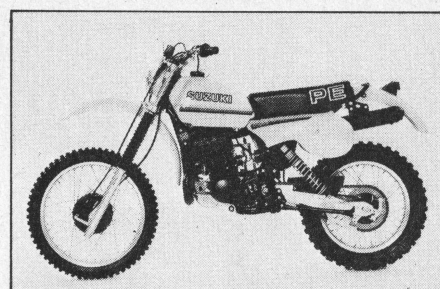
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SUZUKI PE175T



SUZUKI PE250T



SUZUKI PE400T

TEST BIKE	SUZUKI PE175T	SUZUKI PE250T	SUZUKI PE400T
Suggested retail price	\$1379	\$1759	\$1899
Warranty	None	None	None
Number of U.S. dealers	1450	1450	1450
Cost of shop manual	Included	Included	Included
ENGINE			
Type	Two-stroke case-reed single	Two-stroke case-reed single	Two-stroke case-reed single
Displacement	172cc	246cc	397cc
Bore x stroke	62 x 57mm	67 x 70mm	85 x 70mm
Compression	7.6:1	7.7:1	7.3:1
Carburetion	1, 34mm Mikuni slide needle	1, 36mm Mikuni slide needle	1, 36mm Mikuni slide needle
Ignition	PEI (pointless)	PEI (pointless)	PEI (pointless)
Lubrication	Premix	Premix	Premix
Air filter	Oiled foam	Oiled foam	Oiled foam
Battery	None	None	None
DRIVETRAIN			
Primary transmission	Straight-cut gear, 2.761:1	Straight-cut gear, 2.727:1	Straight-cut gear, 2.280:1
Clutch	13 plates, wet	9 plates, wet	11 plates, wet
Final drive	5/16 x 1/4 (No. 520) D.I.D., 48/12	5/16 x 1/4 (No. 520), 52/13	5/16 x 1/4 (No. 520) D.I.D., 46/15
CHASSIS			
Fork	36mm Kayaba, 9.84 in. travel	36mm Kayaba, 9.84 in. travel	36mm Kayaba, 9.8 in. travel
Shocks	Kayaba gas/oil, 9.7 in. travel	Kayaba gas/oil, 10.1 in. travel	Kayaba gas/oil, 10.1 in. travel
Front tire	3.00-21 Bridgestone MX M19	3.00-21 Bridgestone MX M19	3.00-21 Dunlop Sports K290
Rear tire	4.00-18 Bridgestone MX M20	5.10-18 Bridgestone MX M20	5.10-18 Dunlop Sports K290
Rake/trail	29.9°/5.04 in. (128mm)	29.5°/4.92 in. (125mm)	29.5°/4.92 in. (125mm)
Wheelbase	56.3 in. (1430mm)	56.9 in. (1445mm)	56.9 in. (1445mm)
Seat height	36.0 in. (914mm)	37.25 in. (946mm)	37.25 in. (946mm)
Ground clearance	12.2 in. (310mm)	12.5 in. (317mm)	12.5 in. (317mm)
Fuel capacity	2.8 gal. (10.6 liters)	2.8 gal. (10.6 liters)	2.8 gal. (10.6 liters)
Wet weight	241 lbs. (109kg)	259 lbs. (117kg)	268 lbs. (121kg)
Colors	Yellow	Yellow	Yellow
Instruments	Tripmeter resettable by tenths	Tripmeter resettable by tenths	Tripmeter resettable by tenths
PERFORMANCE			
Power to weight ratio	10.8 lbs./hp	9.16 lbs./hp	7.82 lbs./hp
Mileage & approx. range	20 mpg average, 56 miles	25 mpg average, 70 miles	16.9 mpg average, 47 miles
RPM at 60 mph in top gear	7603	6413	5485
Speed in gears at (redline)	(9000) 1st 20.1 mph; 2nd 28.0 mph; 3rd 37.7 mph; 4th 47.8 mph; 5th 59.4 mph; 6th 71.0 mph	(8000) 1st 23.8 mph; 2nd 32.5 mph; 3rd 42.1 mph; 4th 51.9 mph; 5th 62.9 mph; 6th 74.8 mph	(7000) 1st 29.0 mph; 2nd 38.3 mph; 3rd 49.0 mph; 4th 62.6 mph; 5th 76.5 mph