

CLASS WARFARE

The Honda Pro-Link XR200 is for the American market only. Luck smiled on us and we managed to get one for testing. As a yardstick, we used the latest version of Suzuki's venerable PE175. Test by *Rick Kemp*. Photography by *Ian Dobbie*.



We'd been itching to get our hands on a Pro-Link 200 ever since they were first announced, but Honda in its wisdom has seen fit not to import them until next year. A couple of dozen have been brought in from the States and when the man who imports the Simpson off-road helmets came into our office and confessed that he had one, we asked him if he'd like a friend for life. With some reservations, he lent us his bike.

At face value, a four-stroke 200 might appear to

have little in common with a two-stroke 175. But make the four-stroke light, endow it with the latest suspension and, over the rough at least, the gap begins to narrow. There are now separate four-stroke classes in most enduros, so the XR200 is sure to be more popular than some of the heavier alternatives. But just because you ride in a four-stroke class,

that's no reason to lose too much to the two-stroke riders in the overall placings, hence the development of more competitive lightweight machines which will also have financial appeal to the club-man.

SUZUKI PE

HONDA XR

XR200R



Pro-Link transforms the XR200R into a really competitive four-stroke.

The PE, on the other hand, has been around for some time and continues to be a very successful and popular bike. Suzuki has obviously been concentrating on its fully floating rear suspension development, as the PE has only minimal changes for '81. (With the exception of Yamaha, none of the single shock systems have filtered through to enduro bikes as yet.) What Suzuki *has* done is to coax another 4bhp from the 62 x 57mm bore and stroke engine. It now develops 28bhp at 9,500rpm on its 8 to 1 compression. The carburettor is a 34mm Mikuni and the ignition is handled by Suzuki's own electronic system. Primary gears, a wet multiplate clutch and six-speed gearbox make up the drive train.

Frame changes are few: the PE still uses what is basically a two-year-old motocross frame of single downtube design, the only change being the adoption of an extra rail under the engine to protect the brake lever as there is now no bash plate. Suspension has also remained as on the 1980 model. The air-assisted forks give 9.8in of wheel travel and the twin Kayaba units allow the rear wheel 9.7in of movement. It might not be fancy but it still works well enough to win events.

Honda's 200 motor came about by a process of elimination. The 250 was too heavy and the 185 too slow so a 195cc version of the overhead camshaft engine, with a bore and stroke of 66.5 x 57.7mm was



PE175X



Only minor external changes make the PE a bit of a dark horse.

developed. The engine is standard Honda with a wet sump and chain-driven camshaft. The capacitor discharge ignition runs off the left end of the camshaft on top of the engine. A 26mm Keihin carb delivers the juice. The six-speed gearbox is driven by a primary gear and a wet multi-plate clutch. The rear chain runs through a tensioner block in front of the rear sprocket with a bottom roller and a slipper round the swing arm pivot to prevent it from getting worn away. This arrangement seems to work fine but it's rather noisy.

Unlike the Suzuki, it's not the engine that transforms last year's rather unspectacular XR, but the Pro-Link suspension. To get the engine to perform wonders would have probably meant exotic materials, expense and a sacrifice in reliability. So if you're stuck with a certain power output, the only way to improve overall performance is to make that power more usable. Honda's Pro-Link system has one advantage over the other single shock systems — a lower centre of gravity. This is because the linkage that transfers the swing arm's movement to the shocker is connected to the frame under the engine. The Kawasaki and Suzuki systems have their rocker linkages at the top, and Yamaha mounts its monoshock higher in the frame. All these single-shock systems have a higher centre of gravity than conventional twin shocks, though. The Pro-Link has the additional advantage of a very progressive rising rate geometry — in other words, the more the wheel moves up, the faster the rate of compression of the shock, so damping is effectively increased. This allows the use of a straight wound spring and a non-progressive damper.

The two drawbacks of these systems have been tackled well on the XR. Firstly, the space usually occupied by the air filter is taken up by a bloody great shock absorber. So Honda put its filter box behind the shock and aimed the carb off to the right to get round it. Secondly, wear on the highly stressed linkage is kept to a minimum by keeping it as clean as possible. Dirt from the tyres and the chain is deflected by several shields.



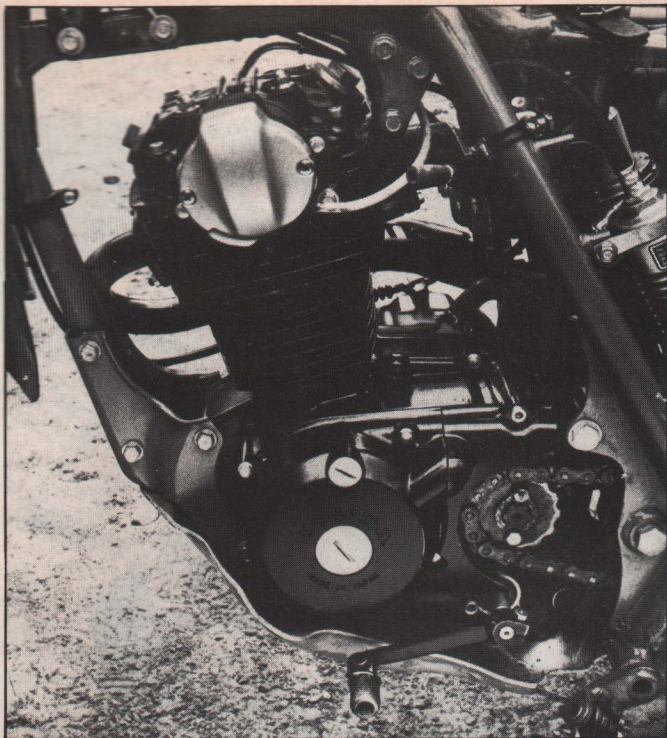
The serious end of the new XR200R: the Pro-Link allows it to reach parts the old model couldn't.

Model:	HONDA XR200R	SUZUKI PE175X
Price inc. VAT:	na	£1042
Warranty:	na	Sale of Goods Act
ENGINE		
Type:	Sohc single	Reed valve 2-stroke single
Capacity:	195cc (66.5x57.7mm)	172cc (62x57mm)
Lubrication:	Wet sump	Premix
Comp. ratio:	10 to 1	8 to 1 (corrected)
Carburation:	26mm Keihin	34mm Mikuni
Ignition:	Capacitor discharge	Pointless electronic
Max. power:	17.3bhp @ 8,500rpm	28bhp @ 9,500rpm
Max. torque:	11.8lb-ft @ 7,000rpm	na
TRANSMISSION		
Primary drive:	Gear	Gear
Clutch:	Wet multiplate	Wet multiplate
Gearbox:	Six-speed	Six-speed
Final drive:	520 chain	520 chain
Overall ratios:		
ELECTRICS		
Power source:	Magneto	Magneto
Battery:	none	none
Headlamp:	6V, 25/25W	6V, 25/25W
CHASSIS		
Frame:	Leading downtube	Single downtube
Suspension, front:	Leading axle air fork. 9.8in travel	Leading axle air fork. 9.8in travel
Suspension, rear:	Pro-Link, 9.2in travel	Swing arm, twin Kayaba shocks, 9.7in travel
Brakes:	Drum/drum	Drum/drum
Tyres:	Bridgestone 3.00 x 21 4.00 x 18	Bridgestone 3.00 x 21 4.00 x 18
CAPACITIES		
Fuel tank:	1.5gal	1.8gal
Oil:		
DIMENSIONS		
Wheelbase:	53.3in	56.3in
Seat height:	35in	35.8in
Handlebar width:	32in	32in
Grnd clrnce:	12.9in	12.6in
Rake/trail:	28.7 deg/4.9in	na
Dry weight:	222lb	215lb
Importer/Manufacturer:		Heron Suzuki GB, 87 Beddington Lane, Croydon, Surrey.

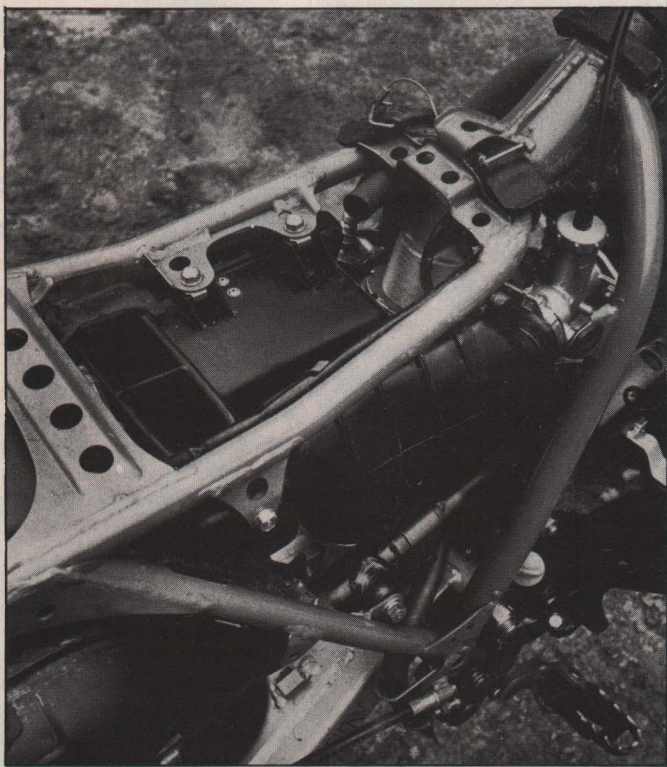
Put both bikes together and they measure up very differently. The Honda looks much smaller and, in fact, it gives away 3in of wheelbase: 53.3 to 56.3. Seat height is about the same, at 35.5in. But surprisingly for a bike with a wet sump, ohc motor, the Honda has more ground clearance — just 12.9 against 12.6in. Walking round the Honda, it's like a marketing man's dream — neat features abound. Zip-up tool bag behind the seat, quick-release brake cable for faster wheel removal, folding brake and gear levers, not to mention touch-set tripmeter. The plastic tank would cause some raised eyebrows in this country and the headlight lens is a bit small, but obviously by the time the official bikes get here — if they ever do — these will be changed. By contrast, the PE is not far off being street legal: it comes with brake light switch, electric horn, dip headlight and a chain-guard. The PE might not be bristling with new features but it doesn't need to be — there's nothing actually wrong or niggling about it.

Firing up the Honda is almost civilised when compared to its two-stroke companions, as it's fitted with a kickstart-linked decompressor. First or second kick usually does the trick and the motor will settle down straight away to that familiar 'chuff chuff' exhaust note emitted by all the Honda singles. The PE will need a few kicks from cold, you can't let go of the throttle while the choke's on and any form of tickover is out of the question until the motor is really warm. This introduction to the two bikes is pretty indicative of their general character. The XR is basically fairly docile, with the power coming in smoothly throughout the rev range, whereas the PE is flat at the bottom end, starts to get a move on in the mid-range, then really lets rip at about three-quarter throttle. But, considering the power increase this motor has had, the delivery isn't outrageous.

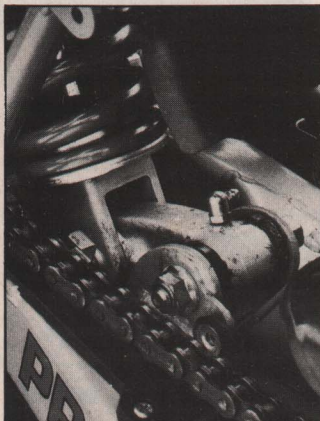
Because of the contrasting natures of the two motors, riding technique differs considerably. The Honda makes most of its power lower down the rev



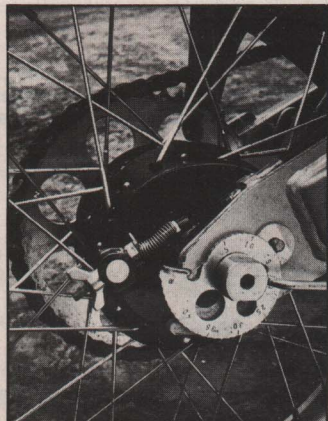
The 17bhp ohc motor is very willing; the exposed gearbox sprocket is a home modification.



The air filter box runs round the fully adjustable monoshock and keeps water out of the carb.



The link end of the Pro-Link.



QD rear brake cable makes for fast wheel removal.

range, so if it's grip you're after you can be quite delicate with the throttle at small openings. But, like most four-strokes, it can suddenly go 'bang' and stall. As you have to use much higher revs with the PE, you're more used to not letting the revs drop too low. But the Honda could probably do with gearing down as it wouldn't really pull in top, even on hard flat sand. No complaints about the gearing on the PE and though we didn't get it flat out in top, either, that was more to do with lack of room than anything else. The snap power of the PE also makes it easier to slide – if you start to lose the front wheel on a turn, you can crack the throttle and step the back out to compensate. As this manoeuvre is more difficult with the Honda, you'd probably tend to ride that much slower. Speed differences also show up in straight line stability. The longer PE is rock steady – you can just sit back over the rear wheel and hold it on the stop. But the XR needs a careful eye and strong arms to keep it on line, as it tends to lead with the front wheel and go *its* own way rather than the way *you* want. To a much lesser degree, it displayed the same tendency as the motocrossers to unload the rear suspension and flap the front wheel when the throttle was shut.

This is the only moan about the Pro-Link, though: the rest of its behaviour over the rough was faultless. In most conditions you'll run out of engine before you run out of suspension. On hard, rough stuff it'll soak up small bumps so you'll hardly notice they're there – even the big stuff doesn't throw it off balance too much. Ditches or sudden deep ruts across your path can be a problem, as the front is hard to lift after the first two gears. Here again, this is probably more to do with lack of power than an unbalanced motorcycle, as it behaves perfectly well when leaping through the air.

So for outright power there's no contest: the PE is way ahead, with the result that, in a fast event, the Honda would have trouble staying with it. But the gap will start to narrow as soon as the going gets tight. There's not much to choose between them on weight –



Below: The Honda is very nimble and can get a move on if coaxed.



7lb to be precise, with the Honda having the penalty – but the four-stroke's advantage is in its shorter wheelbase, quicker steering and greater ground clearance, making it very nippy through



The PE going through the gunge; you've got to be careful not to let the revs drop too low or you could get stuck.



the trees and over the stumps. It would be very easy to take the PE for granted, see one and you've seen 'em all, but it still holds some surprises. It's a very conventional enduro bike and has been

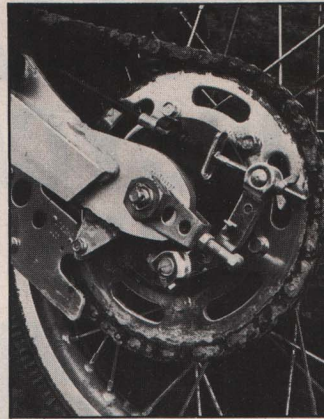
around for some time, but in consequence it's an extremely well-sorted motorcycle. There's nothing on the bike that doesn't work as well as it ought and, over the last few years, more awards must

have been won on PE175s than any other machine at both club and national level. That says a lot.

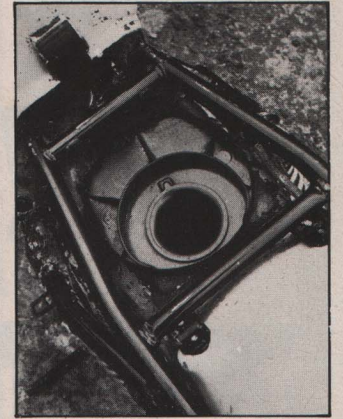
The Honda, if it finally arrives in this country, should create a big impression; it's

without doubt the best four-stroke enduro we've ridden. In open warfare, it probably gets as close as any four-stroke will to tackling the two-stroke domination.

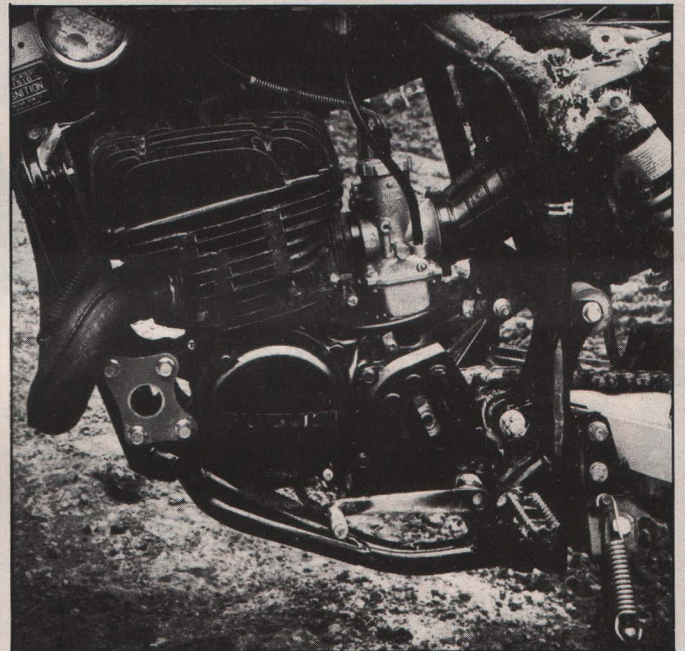
WB?



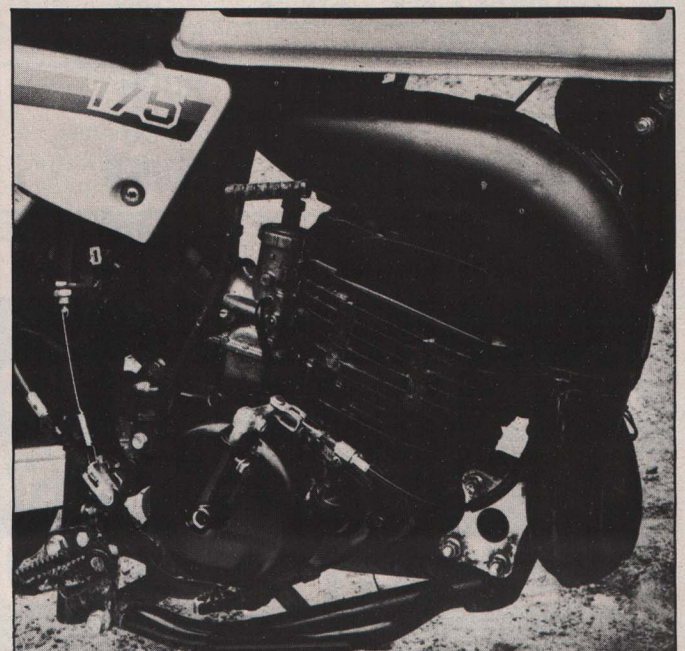
PE's rear wheel has brake and sprocket on the same side.



The PE's filter box is only adequate.



As usual the sprocket guard is best removed; gear lever is not folding due to the extra frame rail.



Despite the large expansion chamber the exhaust note is not loud and piston noise is minimal except when labouring.