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## NEWS FLASH

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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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# An Even Better Mousetrap

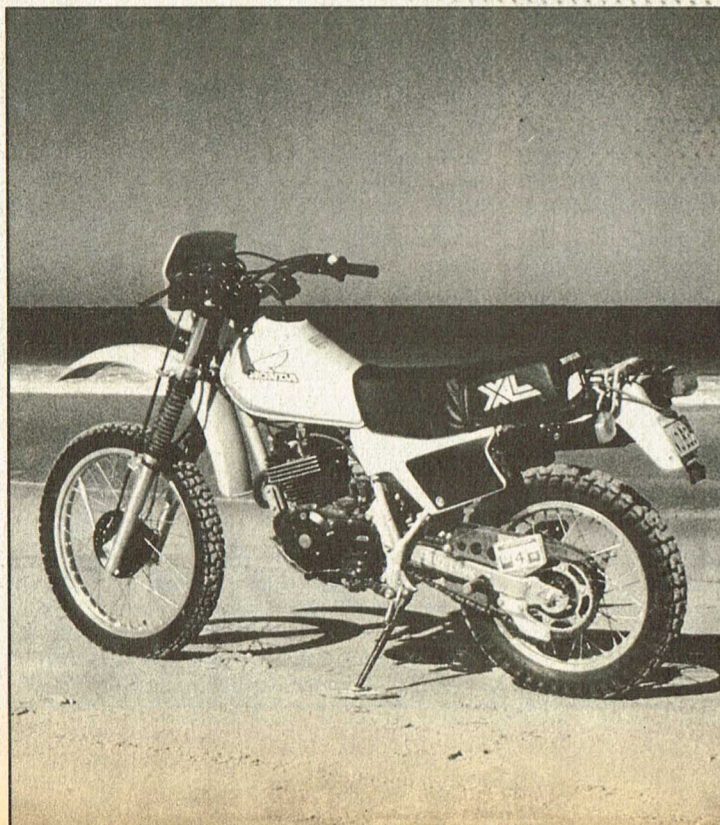
The main thing about being the Champen is the number of challengers out to knock you from your perch. As the big seller on the Australian market, Honda's XL250 has lately had the opposition hard on its heels. Now, up pops the XL250RC, good-looking, even more dirt-capable, yet just as much at home on the tar. Looks like the XL has given the pack the slip once more.

**J**UST when we thought Honda looked like being toppled from its dominance over the middleweight trail bike market, the new XL250RC appears on the scene. Boasting a host of innovative features, the bike looks set to retain its leadership in the dual purpose arena.

Not as dirt-capable as Kawasaki's KLX, the new XL is nonetheless far more than just a weekday commuter hack. For trail riding or not-too-serious competition

it is both an enjoyable and capable mount, while on the road it doubles as economical daily transport. Indeed it is this middle-road approach to the dual purpose compromise which has assured the past — and now future — success of the XL250 model.

Apart from the time-tested powerplant the new Honda bears little resemblance to its ancestors, having more in common with the popular XR250 enduro mount. The new chassis, Pro-Link rear





suspension and six-speed gearbox enhance the XL's off-road abilities without detracting from its commuting function. As a final touch, the bike is eye-catching in both of its colour schemes (silver or red).

Honda's decision to leave the engine virtually unchanged is probably quite a sensible one. After all, time has shown the XL powerplant to be very competitive, with little doubt as to its reliability.

Having recently ridden the 250 cm<sup>3</sup> four-stroke trailsters from Suzuki, Yamaha and Kawasaki, we can confidently say the power output from the XL is at least as good if not better than all of them. Although similar in many respects to Suzuki's DR, the XL has the edge when spun out to high revs. Down low the Yamaha XT may develop more grunt but the response from the Honda in the midrange and top end is far superior.

The XL powerplant has no outstanding feature which would account for power advantage over its competitors. All share similar oversquare bore and stroke dimensions with the XL, and — with the exception of the KL — all run fairly high compression ratios. Like its competitors the Honda uses a capacitor discharge ignition.

The motor's four-valve head, "Pentroof" combustion chamber and dual exhaust ports would be factors contributing to its efficiency. And compared with Suzuki's DR250 (with which it shares these features) the XL250RC is equipped with a slide/needle rather than a constant velocity carburettor.

The 28 mm Keihin unit on the Honda is also fitted with an accelerator pump, which has a marked beneficial effect on bottom-end responsiveness. We expected the combination of accelerator pump and slider carburettor to have an adverse effect upon fuel economy but a check on consumption figures soon dispersed this notion. The XL still retains the twin cable throttle, though the vulnerability of the control has now been lessened with the use of the side-pull throttle from the XR. The choke lever is mounted into the instrument panel where it is easily accessible when riding.

#### **Pleasant starting folks!**

Starting the bike was never an unpleasant task. Using the choke, it would normally fire up first kick when cold, while hot starting was generally accomplished within three kicks. One of the complaints we do have concerns the use of an automatic decompressor instead of a manual lever. If a motor has been flooded with fuel a manual decompressor allows it to be kicked over

rapidly with the throttle open and quickly cleared of excess fuel.

Complementing the responsive power characteristics of the engine is the new model's six-speed transmission. The six available ratios allow the XL to be geared right down to make it suitable for hard trail use, while the top gear is like an overdrive for use on the highway.

Throughout our test the transmission performed without fault, the extra gear proving well worth the extra gear change. Another nicety on the XL is the long life O-ring chain. During the period of our test it needed adjustment only once, and even then this was more out of curiosity than necessity. Adjustment is really quite simple now, thanks to the snail-cam adjusters. To keep the chain off the swinging arm the XL has a few nylon blocks and a wrap-around slider. Nevertheless, we think an automatic chain tensioner would be useful for taking up unwanted slack.

The Pro-Link rear suspension is one of the more interesting inclusions on the new XL. Derived from the CR and XR competition models the single shock scheme has several inherent advantages over the conventional twin unit designs, notably the rising rate progressive springing action afforded by its geometry. In effect this means that in its initial travel the rear suspension reacts to small surface irregularities, maintaining a good feel over rutted or corrugated tracks, yet the variable leverage ratio still allows the spring to handle the big bumps.

Unfortunately, unlike its competition-oriented stablemates, the XL is not bestowed with adjustable rebound damping or a remote fluid reservoir on its Pro-Link system. Otherwise there appears to be little difference in the basic structure.

Although the components in the Pro-Link design end up being heavier than in conventional designs, the distribution of the weight is more favourable than a dual-shock system. Since the weight is lower and more towards the middle of the machine the bike is less inclined to pitch in the fore-aft plane, while the lowered centre of gravity makes the XL easier to turn.

Around the rear backbone and swinging arm pivot the chassis sports a substantial amount of reinforcement and gusseting needed to withstand the increased loads and stresses generated by the suspension. Compared with twin-shock XLs, the rear subframe has been lightened and in place of the grab rail loop used on the XRs, the new XL has a small bolt-on luggage rack which also serves to support the longer rear guard and locate the helmet lock.

Pivoting on needle roller bearings, the



steel box section swinging arm is open-ended, which helps simplify wheel changes, and the brake backing plate slots into a groove on the swinging arm, eliminating the need for a vulnerable torque arm. We're pleased to note that Honda has finally seen the wisdom of fitting grease nipples to all the pivoting linkages in the Pro-Link suspension — none too soon either, as regular lubrication is essential to the longevity of the components.

#### **All's right up front**

Up front the XL displays all the "right" features to enable it to cut it with the best. Tapered roller steering head bearings, forged alloy triple clamps, air-assisted leading axle forks, quick-release front wheel and niceties such as fork gaiters and low friction bushings round out a great package.

When discussing off-road performance it's easy to find fault with the XL — for that matter any trail bike. This is especially so when viewed against the capabilities of some of the specialist dirt machinery available. But within the limitations imposed by its wider role, the XL is one of the better off-road machines among the dual-purpose contenders. It is not quite as well-mannered as the Kawasaki KLX, but still climbs, steers and handles quite well over most types of terrain, providing it isn't pushed too hard.

Although the Honda steers quite well in tighter sections its ability is limited somewhat by weight and available traction. Weighing in at 124 kg the XL is the heaviest in its class, giving away some fourteen kilos to the KLX. Even more surprising is the fact that the new XL is 5 kg up on the older model. Despite the extra flab it remains fairly manoeuvrable, its weight only becoming noticeable during extended deep forest

sections or when trying to manhandle the bike out of an unfavourable predicament.

On higher-speed terrain such as fire roads or transport sections the XL cruises along comfortably, remaining fairly predictable when sliding. We found the quality of the standard rubber was often the limiting consideration, especially on soft or loose surfaces. In muddy conditions the gaps between the closely spaced knobs soon filled, forming a virtually slick tyre — with potentially disastrous results.

With the new model Honda has decided to dispense with its unique 23-inch front wheel and return to the 21-inch norm. Doing so has made the XL more surefooted over both hard and soft ground, being slightly less inclined to wash out when going hard.

One of the XL's most outstanding features must be the new rear suspension. Although it proved to be under-damped the rear end on the XL behaved better than we've come to expect from dual-purpose machines. Whereas Suzuki's Full-Floater suspension as tested on the DR was either too soft or too hard, the Pro-Link felt remarkably flexible.

The Honda now has suspension to match the Kawasaki KLX250, up till now the unchallenged leader of the class. Riding hard over rough or corrugated surfaces the bike returned a fairly plush ride — maintaining traction on all but the worst sections. Larger bumps presented no problems, the rear unit progressively dissipating the energy. The unit has a wide range of preload adjustment though alteration is time consuming as the shock is fairly inaccessible.

Over rough or rocky surfaces the front wheel remains reasonably unmoved from its line, though the fork action benefits from a slightly heavier oil and a

few pounds of preload. Despite its fairly steep 28.5 degree fork rake the XL remained stable during steeper descents, and the brakes offered sufficient feel so that the rider could remain in control of the machine.

#### Bring on the big hills!

Good engine tractability and a suitably low gearing made hillclimbing (one of our favourite pastimes) fun. In dry

conditions the Honda conquered all but the steepest hill. Poor traction was its downfall in the wet.

With a saddle height of 880 mm the XL is a fraction on the tall side of medium, though nowhere near as lofty as the KLX. In most circumstances the average rider should have little difficulty when footing, though shorter riders may be caught out occasionally.

Ground clearance on the XL is a

barely adequate 280 mm, but the quality of the bashplate offers some compensation. Of a substantial alloy construction, it provides good protection to the front, sides and soft underbelly of the engine. Further, a series of rubber grommets mounted between the engine and bashplate add strength and reduce vibration.

Unfortunately the rest of the XL is not as impervious to the misfortunes of the trail as the powerplant. Neither the gear nor brake levers fold, whereas locating holes in the standard bars limit the rotation of the clutch and front brake levers, thereby reducing their chances of surviving a fall. Given these weaknesses even a minor altercation could incapacitate the bike.

For some reason, Honda has retained a steel tank on the XL even though the plastic item on the XR enduro mount is the same capacity and far more durable. Furthermore the plastic guards, sidecovers and headlight cowl have their pigmentation applied as a lacquer. This gives a superb finish, but the pigmentation is easily scratched off leaving the colourless base as a blatant scar.

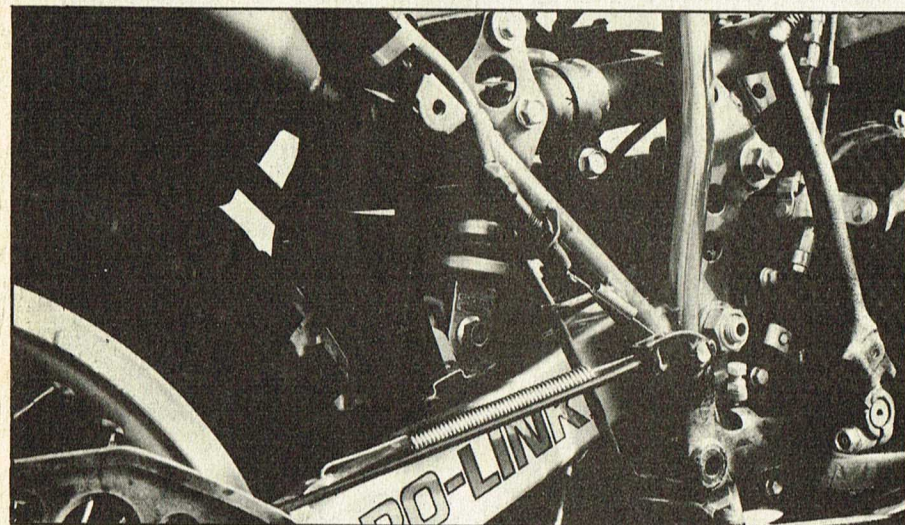
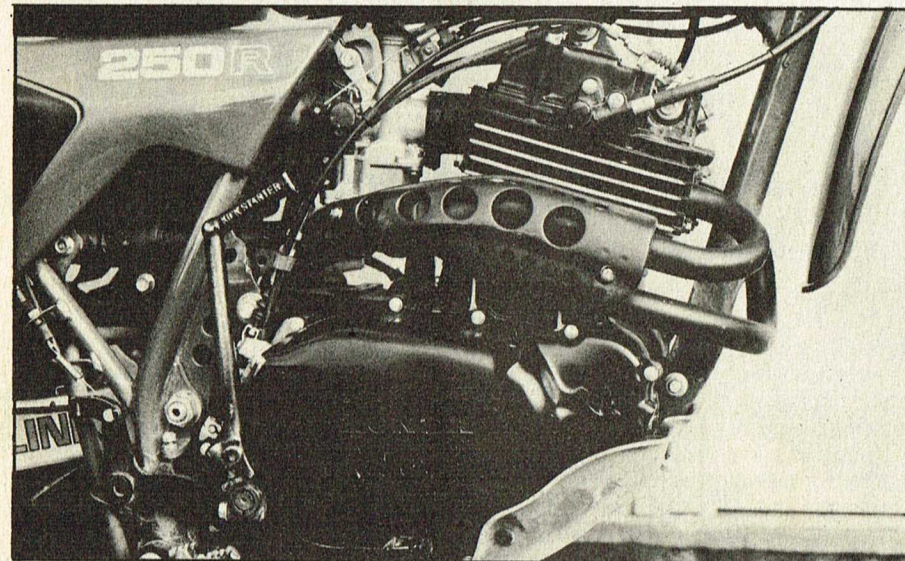
Numerous creek crossings had little effect upon the integrity of the airbox once its lower edge was sealed with Silastic and the drain plugged. The electrics are also of merit as the XL burred on faithfully even though water was lapping against the seat on several occasions.

As an all-purpose commuter the XL is one of the best. It's light, agile and easy to throw about. If the suspension works well on the dirt it performs superbly on the tar, returning a very plush ride. In fact we're amazed at just how well the XL (and other trail bikes) perform on the road. What they lack in power is more than compensated by their agility and virtually unlimited ground clearance. Through a long set of tight flip-flops the XL would embarrass most road bikes.

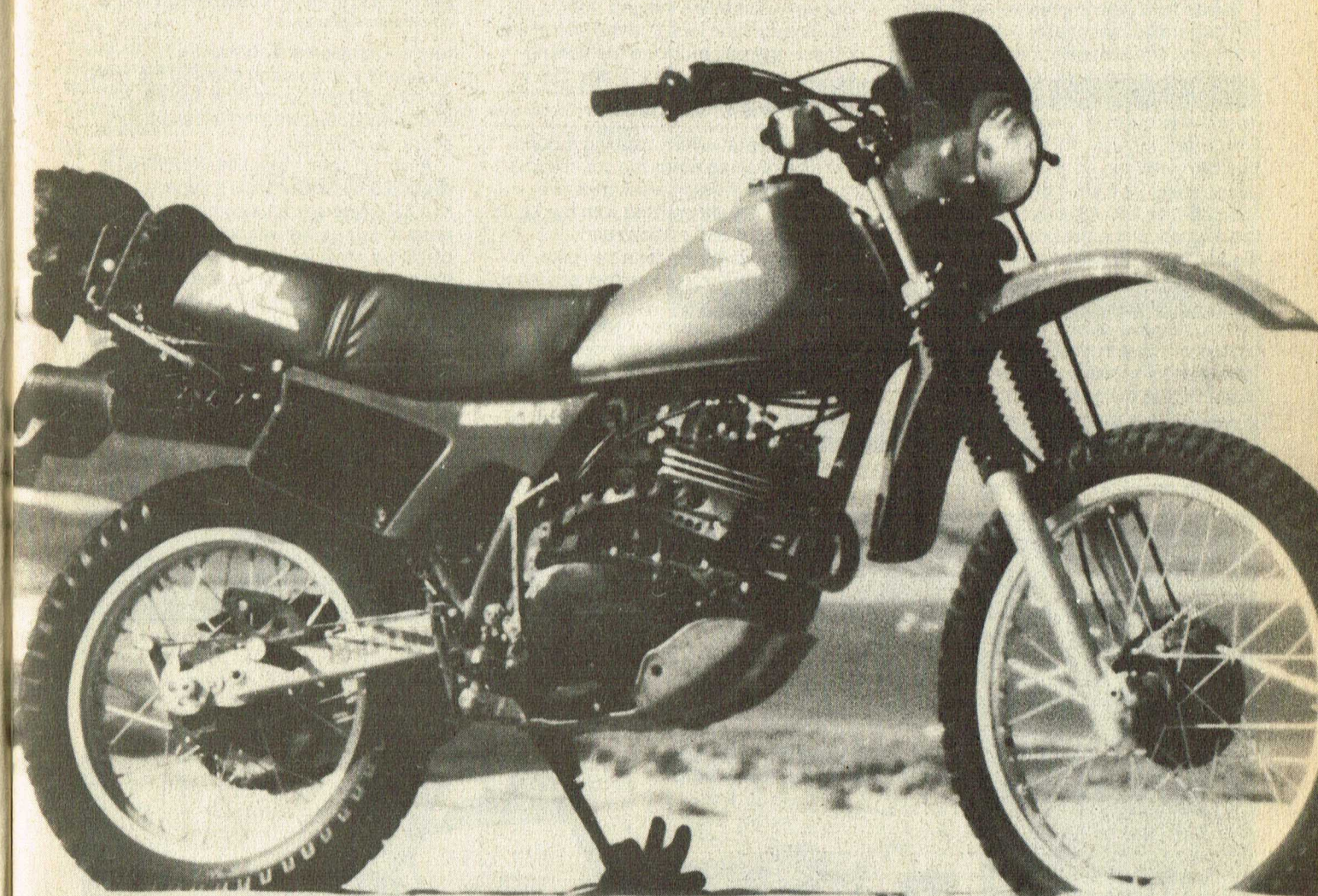
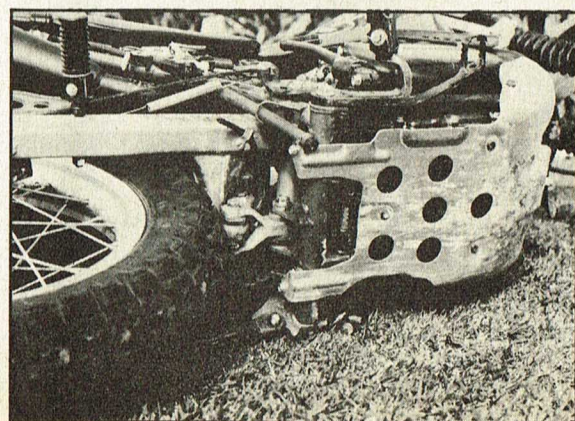
What about the tyres you ask? True, they mightn't be as adhesive as some of the quality road rubber, but it's surprising just how well the standard Yokohamas hang on. In the wet, forget it, but in fine weather they're more than acceptable.

#### Don't get too excited

Before we get too carried away perhaps we should outline some of the XL's limitations. As to be expected the trail bike brakes aren't quite up to high speed crash stops. Up to about 60 km/h they work quite effectively, but above this they become gradually more useless. The solution of course is to ride slower or allow greater distances for stopping. Alternatively, you can ignore



Top: Unchanged in basic specs from the previous model, the XL's powerplant offers economy, tractability and a useful top end. Above: Neato rear suspension proved to be very flexible, if a bit underdamped for really torrid riding. Right: Bash plate is well-designed, protects against the hammering caused largely by too-small ground clearance.



the reality and ride in the hope that you'll never have to make a high-speed crash stop.

The new model is now illuminated by 12V electrics, though unfortunately it still uses the same low wattage headlight. At city speeds its beam is quite acceptable, but it is simply inadequate for extended night riding away from the city lights. The solution to this problem however is quite simple and relatively cheap since there are numerous highly efficient quartz-halogen inserts available for 12V systems.

Aside from its commuting function the XL performed reasonably well on the highway. The six-speed gearbox allowed the 250 to cruise along at 100 km/h without straining the motor, while it also took the occasional burst up to 140 km/h without fuss. Through all of this the bike returned an absolutely astonishing 32.8 km/l over two consecutive 160-km journeys. This is without doubt the best consumption figures we've obtained from any conventional bike, especially since no particular attention was paid to conserving fuel during the test. We have little doubt that the tall sixth gear and its corresponding reduction in engine speed was a major contributing factor.

Given these consumption figures the nine-litre tank should easily take the rider 250 km before thought must be given to refuelling. Nonetheless in most

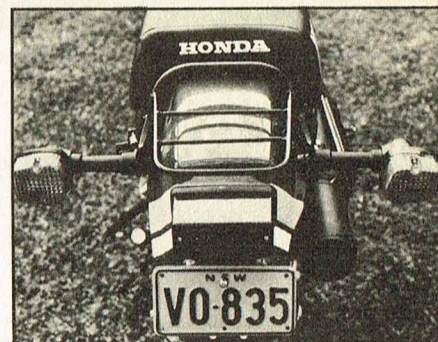
instances it would be rider fatigue which would determine fuel stops.

Saddle comfort on the XL is nothing out of the ordinary. Not too good, not too bad, just ordinary. The seat is sufficiently long to allow both rider and pillion to maintain a reasonably pleasant position without being too close for comfort. Vibration from the powerplant is barely perceivable up to about 90 km/h. Thereafter it tends to blur the mirrors slightly, though at no time did it make contact with the pegs or bars unpleasant. We're pleased to note that Honda has fitted an integral steering-ignition lock into the instrument cluster, thereby reducing the fiddling around needed to lock the steering.

#### An admirable all-rounder

After several weeks zapping around the city, cruising down the coast and a number of dirt-riding weekends, we ended up fairly impressed with the XL. In the dirt it handled, steered and performed admirably for a trail bike, though its compromise rubber proved to be somewhat limiting. The XL showed no fear of hill or high water, though its excess weight reduced manoeuvrability in tight going.

On the road it was the perfect gentleman (or lady if you happened to get the female model). Starting easily hot or cold, the powerplant delivered smooth, usable power over the entire rev



Reasonable seat, neat styling and 12V electrics add to the XL's usefulness in its commuter/highway role.

range. Complementing this the six-speed transmission ensured highway cruising did not overtax the engine. An additional bonus was the excellent fuel economy returned.

As an off-road mount the XL250RC is second only to Kawasaki's superb KLV250, whereas as a commuter hack or short tourer it is without equal in its class. So while we have no doubt as to the quality of the new XL, the price is another matter yet again. With a recommended retail of \$1649 in NSW it is the most expensive dual-purpose machine in its class, some \$100-\$200 dearer than its direct competitors. That, far more than the bike's strengths or weaknesses, is going to be one of the major factors in determining its success in the marketplace. — C.L.

## The French/Senegalese Connection

Now here's a neat custom job on an XL250. And factory-built as well. It's the just-announced Paris-Dakar replica, produced to mark Honda's victory this year in the 20-day, 9500-kilometre blast between Paris and Dakar, the capital of Senegal on the west coast of Africa. Actually, the rally was won on a modified XL500, but both the 250 and the bigger model have been given the replica treatment. Engines and chassis on the Paris-Dakar models are the same as stock. New items are the 21-litre fuel tank, seat, rear carrier, tank bag, front guard and halogen headlight. Suspension is also longer travel. Australian Honda distributors are presently investigating the possibility of importing, if not full bikes, items such as the tank as an accessory for stock XLs.



# Honda XL250OR

## ENGINE

Air-cooled single-cylinder four stroke. Chain driven single overhead cam, four valve head, dual exhaust ports. Wet sump lubrication.  
 Claimed power ..... 16.4 kW at 7500 rpm  
 Claimed torque ..... 20.6 Nm at 7000 rpm  
 Bore x stroke ..... 74 x 57.8 mm  
 Displacement ..... 249 cm<sup>3</sup>  
 Compression ratio ..... 9.3:1  
 Maximum engine speed ..... 8500 rpm  
 Carburetion ..... 28 mm slide/needle Keihin  
 Air filtration ..... Oiled foam  
 Ignition ..... Magneto CDI

## TRANSMISSION

Gear primary drive through wet, multiplate clutch to six-speed indirect pattern gearbox. Final drive by No. 520 O-ring chain.  
 Ratios (overall)  
 First ..... 24.73:1  
 Second ..... 15.78:1  
 Third ..... 11.89:1  
 Fourth ..... 9.57:1  
 Fifth ..... 8.03:1  
 Sixth ..... 6.96:1  
 Primary reduction ..... 2.379:1  
 Secondary reduction ..... 3.143:1 (44/14)

## FRAME AND BRAKES

Welded tubular steel cradle frame. Single top and down tubes, double engine cradle rails. Pro-Link rear suspension, gas/oil damping. Oil-damped, air-assisted leading axle telescopic coil spring forks.  
 Front suspension travel ..... 215 mm  
 Rear suspension wheel travel ..... 190 mm  
 Fork rake ..... 28.5 degrees  
 Fork trail ..... 120 mm  
 Front brake diameter ..... N/A  
 Rear brake diameter ..... N/A  
 Front tyre ..... 3.00 x 21 Yokohama Y969  
 Rear tyre ..... 4.60 x 17 Yokohama Y969

## DIMENSIONS

Dry weight ..... 124 kg  
 Seat height, bike unloaded ..... 880 mm  
 Wheelbase ..... 1385 mm  
 Ground clearance ..... 280 mm  
 Footpeg height ..... 335 mm  
 Fuel capacity (incl. reserve) ..... 9 litres

## PERFORMANCE

Street fuel consumption (average) ..... 28.8 km/litre  
 Dirt fuel consumption (average) ..... 21.0 km/litre

## TEST MACHINE

Manufacturer ..... Honda Motor Company, Japan  
 Test machine ..... Bennett Honda, Alexandria, NSW  
 Price ..... \$1649

**Best points:** Responsive rear suspension, precise steering, excellent gearbox. Long-life chain. Tremendous fuel economy, stylish appearance, 12-Volt electrics, integrated ignition/steering lock.  
**Worst points:** Bike is overweight, levers are too prone to damage, engine decompressor cannot be manually operated.

## SUMMARY

### RATINGS

#### ENGINE

	Poor	Below Average	Average	Above Average	Outstanding
Responsiveness				●	
Smoothness				●	
Low rev power			●		
Midrange power			●		
Top end power				●	
Fuel economy				●	
Starting				●	
Quietness			●		

#### TRANSMISSION

Clutch			●		
Gearbox operation			●		
Ratio suitability				●	
Drivetrain freeplay			●		

#### SUSPENSION

Front				●	
Rear				●	
Front/rear match				●	

#### DIRT RIDING

Ground clearance			●		
Steering (overall)				●	
Braking on dirt			●		
Sliding			●		
Jumping			●		
Hillclimbing				●	
Slow, nagger work		●			
Ease of throwing around			●		
Ability to forgive rider error			●		

#### STREET RIDING

Riding position				●	
Seat comfort				●	
Ride comfort				●	
Highest cruising speed				●	
Touring range				●	
Street handling (overall)				●	
Stability at speed				●	
Braking on tar			●		
Tyres			●		
Pillioning			●		

#### GENERAL

Location of controls			●		
Lighting			●		
Rearview mirrors			●		
Horn			●		
Toolkit			●		
Quality of finish			●		
Overall styling				●	

#### VALUE FOR MONEY

			●		
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