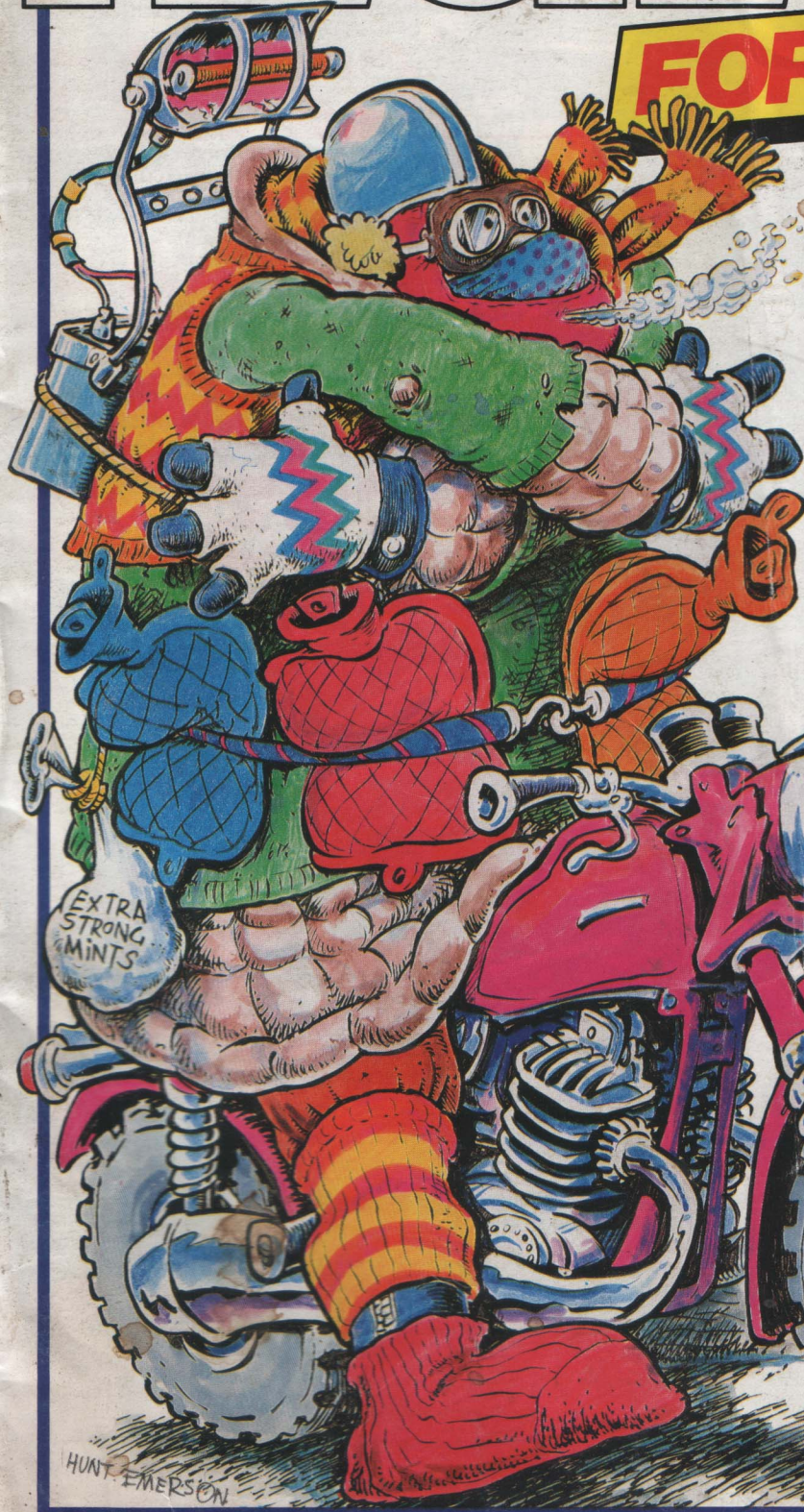


motorcycle MECHANICS

FORTNIGHTLY



Boulevard cruising
 Cross the Channel - FREE
 Buyer's Guide: What bike to get
 Honda's dirty business
 DT175 - readers verdict
 TZ track test

*Conquer
 the
 cold*



February 3rd-16th, 1982

Helmets at the centre of a controversy page 4.



WIN
A TRIP
ABROAD
— PAGE 39



Editor: Ian Beacham Assistant Editor (Features): Brian Crichton Production Editor: Phil Balding News Editor: Malcolm Gough Road Test Editor: Jim Lindsay Technical Editor: John Robinson Photographer: Martyn Barnwell Designer: Tony Baskeyfield Editor's Secretary: Gill Hopkins Editorial Secretary: Jane Leech Advertisement Controller: Peter Crew Advertisement Manager Chris Seaton

Editorial and Advertising Offices: Motorcycle Mechanics, Bushfield House, Orton Centre, Peterborough PE2 0UW. Tel: 0733-237111. Telex: 32167. Classified Advertising: Tel: 0733-236644.

Annual subscription rate: £22.00 (inland), £23.00 (overseas), £34.00 (airmail).

Cheques or postal orders should be made payable to Motorcycle Mechanics and sent to Competition House, Farndon Road, Market Harborough, Leics.

U.S. subscription agent: Buzz Walneck, Walneck's Vintage Motorcycles, 7923 Janes Avenue, Woodbridge, Illinois 60545.

© 1982 EMAP National Publications Ltd.

Readers are welcome to submit articles and photos for consideration.

● To ensure you get your copy every fortnight, place a firm order with your newsagent. If you experience difficulty in obtaining the magazine regularly, please telephone our Circulation Department on 0733 264666 with the name of your newsagent and they will see he is supplied.

On test

- 10 BORN TO BE WILD
Harsh power, ride and sound from Yamaha's TZ 250.
- 12 BOULEVARD CRUISING
A couple of production custom bikes take to the road.
- 42 THE FILTHY FEW
Hondas hit the mud trail.

Technical advice

- 40 TARGET — 60MPH
Honda MB50 speed tune — part two
- 58 TROUBLE SHOOTER
Problems with a noisy H100.
- 66 A CHAIN REACTION
How to get the most out of a final drive chain.

Better biking

- 32 WHAT BIKE?
Discovering an old Brit.

Talking points

- 4 STAR WARS
Helmets at the heart of a controversy.
- 21 MILTON'S PROGRESS
A write-off gets a transformation.
- 26 COLDCHILLINFINGERFREEZINNOSERUNNING . . .
Handwarmers on test.
- 28 BODYWRAPPINFINGERFRYINSWEATMAKIN . . .
Or how to survive sub-zero winter trips.
- 49 HONEST BIKE BUYER'S GUIDE
Get the facts about your bike.

Information

- 8 LOOK WHAT'S NEW
We tell you what new goodies are on the market.
- 24 FIRST ENCOUNTERS
Choosing the right oversuit and leathers.
- 34 DINOSAURS DO IT IN WINTER
More readers recount their holiday experiences.
- 39 WIN A TRIP ABROAD
In our free and easy to enter competition.
- 57 BIKING WITH THE BMF
Catch up on all the latest news and views.
- 70 TEST IT FOR YOURSELF
You have your say on the Yamaha DT 175.
- 73 MAILBAG
Two pages of your views.



fill



Top left: Screwloose Taylor aviates and finds time to pull
Above: 'Why didn't you
Top right: Once you
Right: The course a variety

the my few

TO INJECT some excitement into our winter schedule, we took eight Honda off-road machines down to Matchams Park in Hampshire and subjected them to a five hour thrashing along similar lines to our Kawasaki bash (*Mechanics* December 9th).

We'd already tested the 125, 185 and 250 bikes extensively but for all but one of us, the ATCs (All Terrain Cycles) were a new experience. They're all the rage in the States, but over here the lack of vast stretches of open country and the fact that they are not road legal limits their possibilities considerably.

The wide section tyres exert very little pressure on the ground. Thus an ATC travels over deep mud with ease, running on the surface rather than digging a small trench through which to drag itself as a bike tends to do. The traction is also very good and we found that while the bikes were undeniably quicker round the track, there were sections of the track that the three-wheelers could tackle with ease while the bikes floundered helplessly in the sand.

XL125S-B

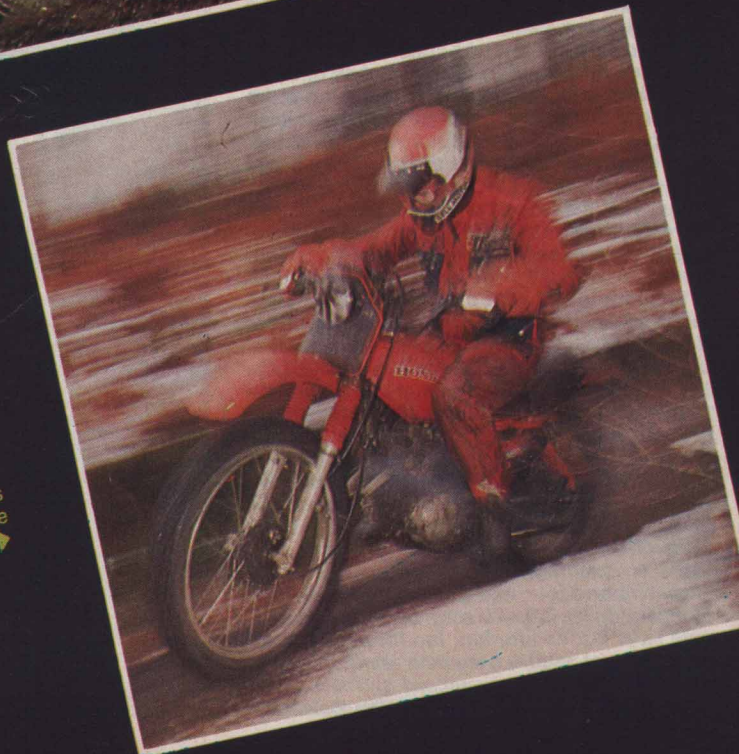
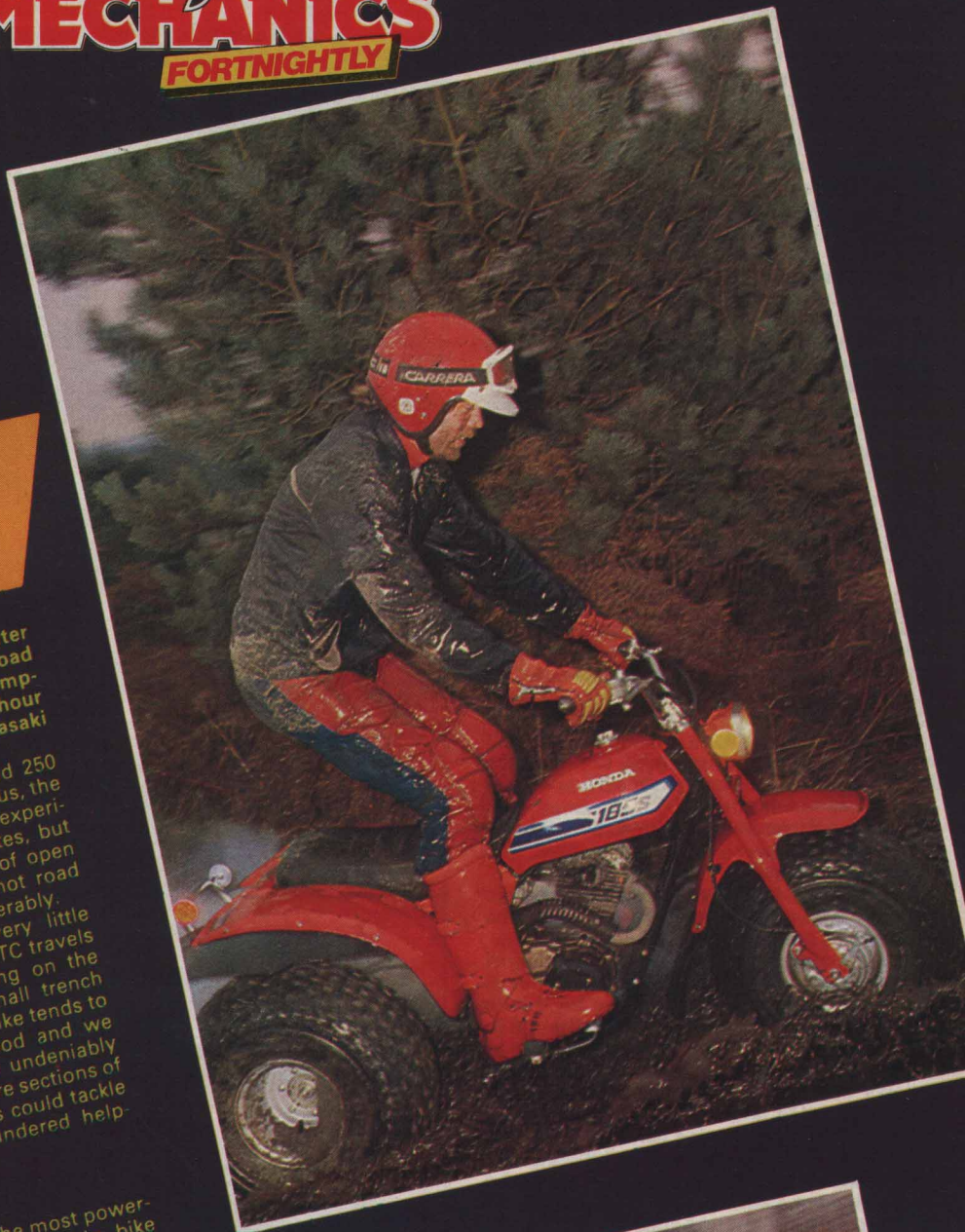
HONDA'S XL125 may not be the most powerful in its class but it does have big bike dimensions which give it good handling. Couple this advantage with a set of trail tyres which gave remarkable grip through the sand and mud at Matchams and the result is an enjoyable trail ride.

Being fairly light the Honda can be turned quickly, and flipped through the tight sections which demand more effort and setting up on the 250.

It also gives a comfortable ride thanks to the good relation of seat, bar, tank, and footrest positioning. Some lightweights previously ridden at Matchams gave me backache because the bars were too low. The almost 250 sizing of the 125 pays dividends in this respect.

The XL125 doesn't quite have the power of an equivalent two-stroke. Engine revs and gearbox have to be used to the full to make the best of the power available.

Two 125s were on test for us at Matchams and both gave every indication that they were draining their float bowls. ▶



the front wheel in a whoop
funny faces for the camera.
me you'd parked it there?
get the hang of the handling,
ATCs are great fun.
at Matchams Park had a good
sections including some fast-
as-you-dare bits.

They would buzz along well enough down the straights but the motors were gasping after that, and once one cut out. After a few seconds the float bowls were presumably filling again and the Hondas could resume play. Hopefully adjusting the float heights would be the simple cure to the problem.

The other main cause of anguish for the Honda was throwing the skinny chain. Frequent adjustment was necessary to keep it on the sprockets.

Anyone thinking of buying one of these models for a lot of trail use would do well to investigate the possibility of fitting a wider chain and sprockets.

When the chain did come off it jammed between the rear shock and swinging arm. The easiest way to right it was remove the lower shock screw allowing the shock to be pulled back and the chain extracted.

Obviously, the Honda has limitations but it does provide a good starting point for the off-road rider who limits himself to 125cc. □

XL125S-B..... £699

Brian Crichton



ATC185S

OF ALL the ATCs the 185S-B was the most sought after; whenever I wanted to grab it, someone else was hammering round the track, usually with a large grin on his face.

The 185 cc four stroke single has enough poke to push the trike's 280 lb along at exciting speeds, especially when you have tight corners to deal with. There are two different approaches possible in bends. Because of the lack of a differential, you've got to get the weight off the inside wheel so that it slips while the outer wheel drives the machine through the corner. If you want to take it easy, lean away from the direction of the corner and you can trickle through on a modicum of throttle.

The fast approach is much more fun. You need to hang off into the bend as much as you can with your weight well forward and then pile on as much throttle as you dare. If you get it right, you should slide through the turn with

Left: Starting up the ATC 110-B a-la lawnmower.

Below: 'And the next minute, it spat me off!' Brian Crichton bails out of the baby ATC70.

ATC 70-B

IT'S HARD not to fall in love with Honda's tiniest ATC, the 70. A sophisticated toy for all the family, its biggest hardship is the lack of private land on which to ride it.

It starts lawnmower style by pulling a cord. The cord is rather long and awkward, and when the little ATC is inevitably upturned the flooded engine invariably needs several pulls to get it spinning again.

The four-stroke ohc unit drives both wheels via chain and sprocket as on the other ATC models tested here.

Its limited power requires that hills are charged, otherwise the semi-automatic engine runs out of puff.

The three giant tyres running at about 5psi or less create a lot of drag. This means that 99 times out of a 100 you don't have to use the brakes to slow down. Closing the throttle is enough.

The throttle itself is not the usual twistgrip. It follows the lawnmower tradition by being a thumb operated lever.

There's sound reasoning behind this design. If the ATC were tipped over on its right side and it had a normal twistgrip this could be jammed open causing the vehicle to whizz round in circles with the bar as its pivot point.

You can get used to this new style of cable operation quite quickly. Requiring a bit more concentration is the pedal gearchange which engages the automatic clutch when touched. In effect this means that the bike will not move off until you have removed your foot from the lever. The message comes across after you have selected first, built up the revs to move, and then suddenly the front wheel pops into the air as you take your left foot off the lever.

Steering is the next obstacle. The 70 has a fairly narrow track which allows it to squeeze through tight gaps. But bearing in mind that both wheels drive and all the suspension is in the tyres you can envisage that the 70, like the bigger models, has peculiar characteristics.

Just when you think you are getting the hang of it the little demon suddenly turns at right angles leaving you wondering what you did wrong. Because there are bars you try to lean, eventually compromising between a style of driving and riding.

It's an exciting new challenge — different from two and four wheels, and even sidecars. Honda's dinky little 70 may be on the expensive side, but its fun, fun, fun for people of all ages. All you need is a ten acre rear garden. □

ATC 70-B..... £395

Brian Crichton





Above: Screwloose 'I eat sand' Taylor, about to discover how easy it is to loop the ATC185S.

Below: Malc Birkett showing the necessary technique for putting the 110 through corners in one piece.



the inside wheel either off the ground altogether or just scrubbing the surface lightly. Plonking your weight back in the seat will obviously bring the inside wheel back to earth. That will straighten the bike up and, usually, end the sideways slide you've set up to negotiate the bend.

The more slippery the going, the easier it is to overcome the ATC's tendency to always want to go in a straight line. It was OK at Matchams where melting snow had made a great deal of the course good and wet, but the next day I tried the 185S at my sister's place on a four inch layer of fresh snow and it was better still. Hanging well off, it was possible to spin the bike round in tiny circles on full power and attempt really fast slide turns.

Fast turns on firm going are possible but you stand a greater chance of tipping the bike over. The most amusing crash I saw was in the snow. My brother-in-law had been rapidly gaining confidence and was in mid-slide when the outside wheel finally cut through the snow, hit firm ground and suddenly found about 100 per cent more traction. This effectively and abruptly stopped all sideways motion flipping the bike on to its back and sending my brother-in-law firmly to earth.

To make starting easier, the 185 has a decompressor mounted on the right hand side of the cylinder head. Before pulling on the recoil starter, you raise the lever which lifts the exhaust valve just enough for you to give the motor a good spin. Once the engine has gone over compression, the decompressor releases itself automatically. Starting is easy once you discover the valve lifter and downright painful until you do, as my wrenched arm muscles will testify.

Transmission is four speed all down with an automatic clutch, final drive being taken care of by a fully enclosed chain which only needed adjusting towards the end of the five hours.

What impressed me most about the 185S was its ability to take all the punishment without scars. Whatever the course threw at it, it threw back with equal vigour and kept on coming.

ATC 185S.....£849
Jim Lindsay

ATC110-B

MECHANICALLY, the ATC 110 is similar to that of the 185S. The only major difference, apart from the fact that it is smaller and lighter, is that the 110 has a dual-mode transmission. For normal riding the higher of the two available ratios is used (the operation of the four-speed gearbox is the same as the 185). If you've got very difficult terrain to cross, however, you can select the 'Low' ratio by means of a lever located on the lower rear section of the left-hand crankcase.

In the low mode, the 110 feels as if it has enough power to scale a Euro Butter Mountain while towing half a Euro Apple Mountain behind it.

These three footers are tough too. Enthusiastic Malc Birkett was negotiating one of the tighter sections of the course through the trees when speed and adrenalin got the better of co-ordination and he cannoned into a stationary 110 at the side of the track, knocking it on to its side. Despite the force of the impact, neither bike suffered any damage.

Charging hard through long puddles caused severe aquaplaning up front on both the 185S and the 110. It was a strange feeling to suddenly have no control via the bars and I had to rely on body lean alone to achieve something approximating to directional control.

Cambers are difficult to negotiate too, ATCs have a strong tendency to go with a camber and more effort is required to steer against it

than is necessary on a two-wheeler. And that's why no less than three of us dived down the same bank at the same point ending up in a barbed wire fence, narrowly avoiding an unwanted shave.

With no suspension to cushion impacts, we got a fair pounding especially through Matcham's many whoop-de-dooos. The huge tyres throw tremendous bow waves in deep water splashes so you get a comprehensive soaking to go with your jarred bones.

The ATCs started life as a spare time project of one of Honda's R & D men and, in the States at least, they've come a long way from there. Brian Crichton sums them up best in his piece on the 70; fun fun, fun all the way. All you need is a ten acre rear garden.

ATC110-B.....£650

Jim Lindsay



The XL185 combines agility, power and versatility with excellent value for money.

For a heavy machine, the XL250 has tremendous handling on the rough.

Honda XL250S-B and XL185S-B

JUST a few issues ago I wrote a piece looking back on the best bikes of the last year. Honda's 250 trail bike figured very favourably in the memory and I said so.

This was based largely on a shortish road test plus a fairly tough, day-long enduro test. We were scheduled to collect the trail bikes again to back up the ATCs featured here, and as the day got nearer I began to have doubts.

From the warm, dry glow behind an over-worked typewriter, recollections and reflections get rosier as the days and weeks go by. Maybe the conditions at our enduro circuit just happen to suit the Hondas. Maybe I'd just written a load of exaggerations whose origins were closer to a poetic rather than a competition licence. And our test on the Kawasaki enduro bikes had shown us that the loose sand, wet mud and non-stop whoops that make Matchams park could be quite punishing.

Unlike most other four-strokes in this class, the Hondas are usually easy to fire up. I say usually because in the beginnings of December's snow, we managed to gas up both the 250 and 185 which refused to fire up until new plugs had been fitted.

It seemed, as we pushed the bikes up and down the sloping access road, that my forbodings were going to be borne out.

But before my fores were properly boded the 185 crackled into life, closely followed by the 250 as Andy Wilson rapidly spun a new plug into the still-clean motor. The first few hundred yards on the 250 restored some of my faith in my memory. The seat, suspension and riding position blend together to give a fine balance of comfort and control which makes the XL so easy to handle.

The fast and predictable steering coupled with the rapid response from the flexible

motor, produces a bike which isn't fussy about being in the right gear, or even getting on the wrong line.

And after the early morning starting problem, both Hondas ran perfectly reliably with no other problems. We were expecting rapid wear from the abrasive sand, but apart from the chains, we had no problems.

In terms of handling, comfort and braking there is very little to choose between the 185 and the 250. I'd built up a preference for the 250 because it has a noticeable edge in power and all-out performance, which is only really noticeable on the road or in very fast dirt sections.

In real terms this would also be offset by the fact that the 185 is £237 cheaper. In the more difficult sections the 185 was often easier to use. Screwloose preferred it, although he was certainly biased after making an ungainly spectacle of himself on the 250.

He made a front wheel landing so hard that the bike buried itself in the deep sand with the unfortunate 'loose somewhere underneath. Unable to see, or breathe for that matter, and being completely ignored by everyone else, his only escape route was to chew through the front mudguard. Which explains the modification seen in the pictures.

Nearly as fast as an enduro racer, the XL trail bikes are also very forgiving. Their biggest attraction is the way they can get painlessly past obstacles. Instead of crashing heavily into the water-filled troughs of the whoop-de-dooos and getting a faceful of my own spray, I could keep the front end pointing up in the dry, most of the time anyway. Coming across unexpected obstacles, like deep puddles or fallen branches, it always seemed easy to shift weight, pick up the front wheel and loft the bike across with a rapid tweak of power.

It's not difficult to manage that at the beginning of the day; what impressed me was that I could still do it despite the mental and physical exhaustion at the end of a full day's riding.

XL250S-B.....£978

XL185S-B.....£741

John Robinson

