

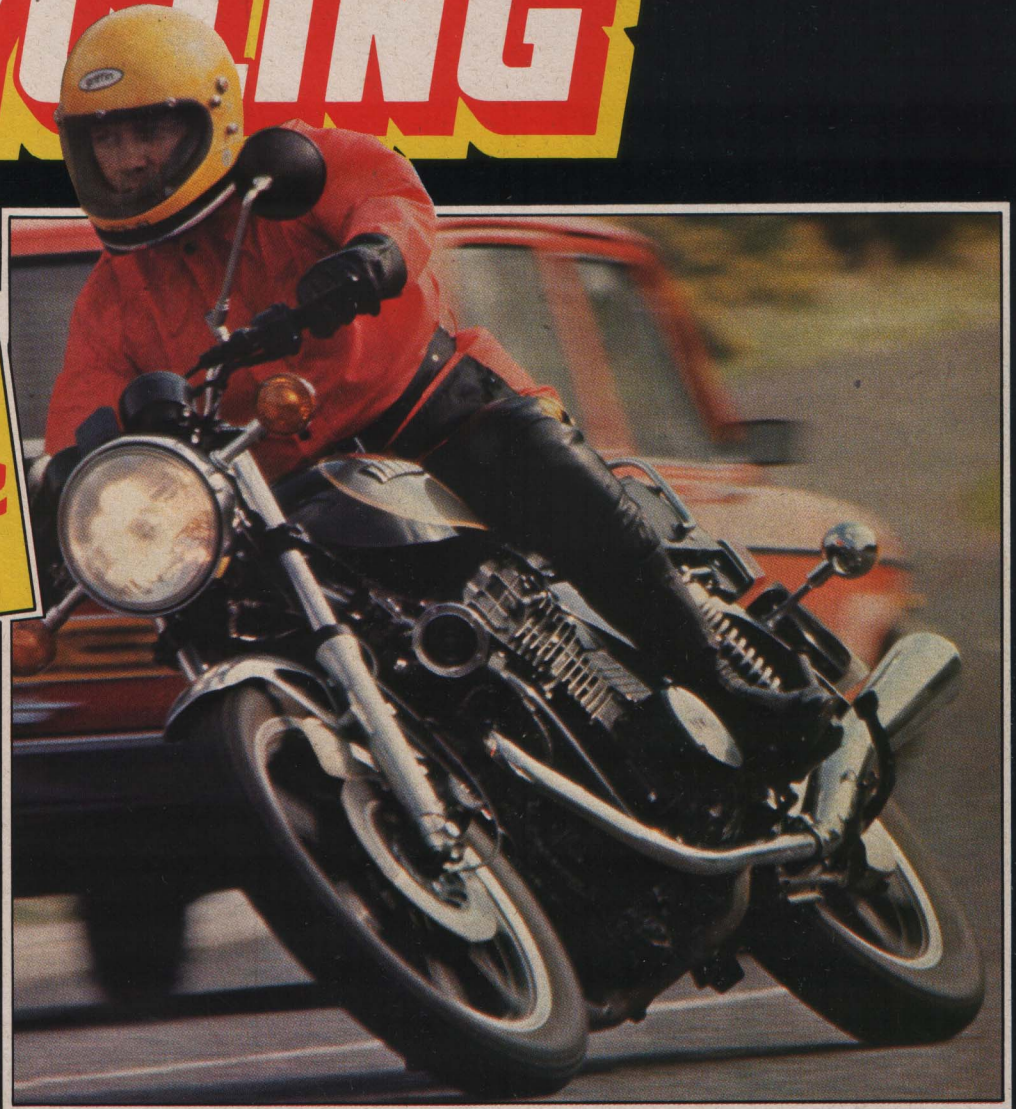
MOTOR CYCLING

YAMAHA
3 Bike Test Special

JULY 1980 60p

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Fairing Guide

Yamaha XT250

DON'T be fooled by the off-road livery for at the heart of the XT250 is a decent road bike built for sunshiny days.

Yamaha's first attempt at a 250 four-stroke single trail machine, designed to compete with Kawasaki's KL250 and Honda's XL250, has resulted in a very pleasant, superb handling, easy going road bike with the ability to satisfy the occasional off-road whim.

Its potential to be any more than that is hindered by its smoothly docile engine that would be easily outclassed by a two-stroke. But the XT is the kind of bike that will stand out on the showroom floor as the one with class and purpose. It has a striking colour scheme of black and white touched off by the mellow glint of gold-anodised wheel rims. It oozes all the airs of a well groomed racehorse.

Speeding for grub

Before we'd had time to stand back and admire all the new bits we were sent to Coventry. This evening trip amounted to 170 miles of pure redlining as the threat of no dins hung grimly over us grub-happy riders if we didn't arrive before 10pm. We did it in just over three hours... and missed dinner by ten minutes.

Matched against our valve bouncing XS250 Yam the XT came close to keeping up with it, but not quite. What it could gain on the twisty lanes and roundabouts, it could not maintain on the long straights and it would very gradually get left behind. An indicated 70mph (when checked the speedo was found to be 100 percent accurate) was its

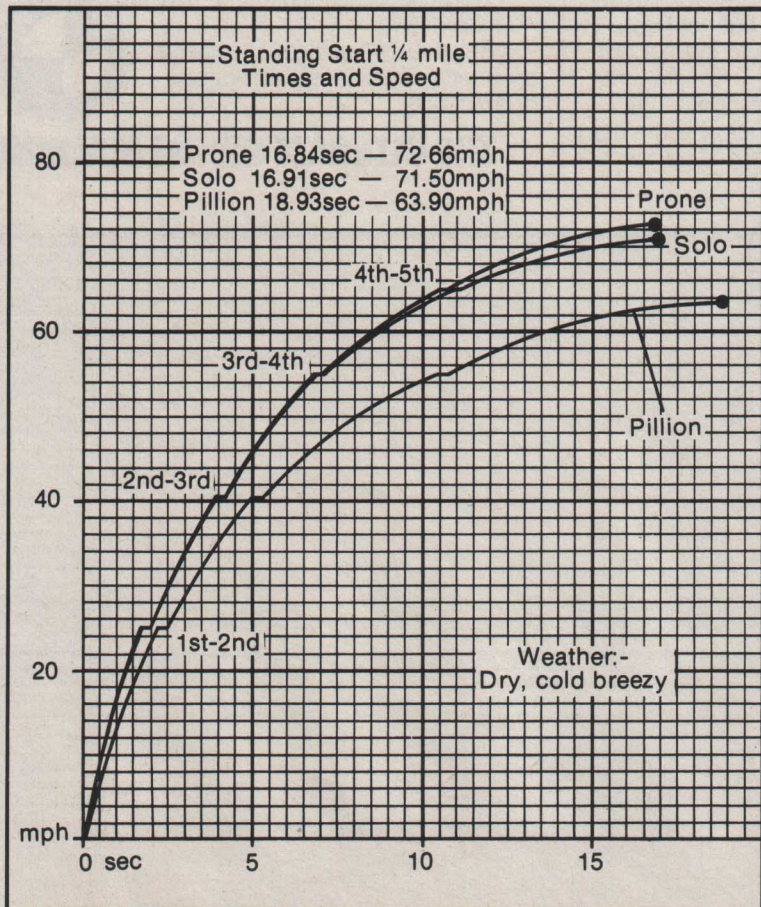
absolute maximum on the road though this could easily be discouraged to 65mph by the inevitable hills and headwinds.

As a potential off-road bike, the XT is geared to have more bottom end than top end hence its tendency to run out of steam at the higher speeds. But if it was kept revving high, with a change down to fourth gear every now and then to bolster it up, it would simply keep on trucking.

Stopping for petrol we noticed that like the Honda XL250, the XT is also fitted with a decompression device which links the kickstart to the exhaust valve. This makes turning the engine over much easier so that even if it doesn't start first kick — and ours very often didn't — at least you don't risk having your leg concertina'd if the start lever kicks back.

What stood out most about the XT on this Marathon hack trip was the handling greatly flattered by the tyres. Often trail tyres affect stability at speed, causing very slight but noticeable side to side wiggling triggered by the knobbles. But now Yamaha have joined Honda and Suzuki by fitting new style trail tyres which are definitely better on the road than they are off. In fact as we proved with our Honda XLS500 test the compromise trail tyres were virtually useless on muddy terrain.

If the tyres provided good grip on the dry tarmac roads then they couldn't have been fitted to a better handling trail bike to help prove their worth. The XT did not twitch or squirm or become all crossed up and corners were being taken tighter and faster as the journey progressed. It was such a good feeling to see the tail lamp of the XS and be able to catch up with it.



SPEEDO

ind	true
20	—
30	30
40	40
50	50
60	60
70	70
80	—
90	—

MAXIMUM SPEEDS and SPEED RANGES

gear		mph	
		max	min
1	solo	27.90	3.75
	pillion	—	—
2	solo	48.19	5.29
	pillion	—	—
3	solo	58.86	6.85
	pillion	—	—
4	solo	68.71	9.42
	pillion	—	—
5	solo	69.78	13.07
	pillion	67.42	—
5	prone	79.55	—
	pillion	—	—

Milometer

Accurate

FLEXIBILITY IN TOP GEAR(sec)

mph	30-50	40-60	50-70	60-80	70-90	80-100
solo	9.4	12.4	—	—	—	—

Performance figures obtained at:-
Motor Industry Research Association Test Track
Nr. Atherstone, Works.

Test Rider: Merrill Boulton
Weight: 8 stone



XT250

BRAKES(both)

mph	solo		pillion	
	ft	m	ft	m
30	40	12	46	14
40	71	22	85	26
50	114	35	130	40
60	156	48	87	57
70	208	64	—	—

OIL CONSUMPTION

Negligible

MPG

mph	solo	pillion
30	121	103
40	95	85
50	80	69
60	61	55
70	—	—
overall	58mpg	

MPH per 1000 rpm

gear	mph
1	
2	
3	
4	
5	
6	

As the dark empty road briefly became a Saturday afternoon race track, whoever was riding the XT would find himself leaning at incredible angles, with head horizontal and nose on elbow, wondering when the handlebars were going to scrape. (Such fantasies.) With the throttle wide open the XT would stick to its line, no wobbles or weavings, as if it was suspended in air. If it only had a pair of clip-ons . . . but then it wouldn't be the same.

The XT is tall slim and light, just like a trail bike should be with a good length wheelbase, long enough not to cause twitchiness yet short enough to have quick, light steering.

The leading axle front forks give a shallower fork rake and increased trail which in riding terms contributes to the quick, light steering too. The superb damping in the long travel forks meant the front end held as steady as a rock and we were looking forward to trying it out on the rough.

The rear end has the classic cantilever design that is more rigid than conventional tube swing arms and the single shock absorber unit gave the equivalent rock steadiness at the rear as there was at the front. With one person riding, the rear suspension was so firm as to be a little on the hard side, and it seemed as if nothing would bottom it.

This meant that the averaged size pillion passenger had little effect on the way the bike handled which is just as well because it could hardly be adjusted in a flash. The tank and seat have to be unbolted to gain access to the suspension unit — similar to the DT175 where the seat has to be removed — then it's a question of fiddling around with one large locking nut and a similar-sized adjusting nut for which there are no spanners supplied in the toolkit.

The 8-piece toolkit locates under the seat next to the battery in a triangular cubby-hole. Then it is enclosed by an awkward-fitting flimsy plastic cover secured with a winged screw.

The toolkit is not lockable since it is then covered with a plastic side panel which wobbled so much we were never sure it was on properly.

Back to the hack

Two other vital statistics that earned themselves a slap on the back during this first trip were the lights and the brakes.

Considering the electrical system is only 6 volt — a larger generator and battery would add unnecessary weight — the 35w headlamp was reasonably bright. Although it didn't light up the road for miles, the lens efficiently controlled the light so that where it shone it was clear and piercing. Good lights meant we could maintain quick progress even on unlit roads.

Riding flat out means occasionally braking flat out and when we did we found the brakes to be immediately responsive and effective with great feel. Though the figures at the track seem to contradict their effectiveness, in practise on the road they performed very well, especially the front brake, where the amount of grip was directly proportional to the pull on the lever.

The XT was fast becoming a really enjoyable and fun bike to ride, the brake and clutch work being a gentle two finger operation and gearing through the box so smooth that it was really quite a shock when we swapped bikes halfway and I had to ride the XS250. It felt like an uncoordinated, pregnant camel in comparison and I took a while to adjust.

At our destination we discovered, as expected, that the high revving had taken its toll on the fuel consumption which dropped from a previous figure of 64mpg to 51mpg. This was the second lowest figure recorded on that bike. The lowest was 45mpg which was probably the trip back again. I'm not sure what the incentive was that time...

The average overall fuel consumption after more than 1000 miles of riding on both the road and the rough worked out at 58mpg which compares very favourably with its competitors, being bettered only by the Honda XLS at 61mpg.

Riding gently

When we weren't bursting our braces trying to arrive somewhere for something it was nice to ride the XT gently and appreciate the smoothness and responsiveness of the four-stroke single. It seemed to have a lazy way of riding through traffic and along the sunny stretches of country road that meant the gearbox didn't have to be used much at all. The docile 250 would open up from tickover speed in most gears and slowly wind itself up to whatever was required with no splutter or gasp.

The Mikuni carburettor is fitted with an accelerator pump, the sort of aid more commonly found on cars or superbikes. Its job is to smooth out the effects of a sudden throttle opening. For when the throttle is whacked open, there is a sudden increase of air in the fuel mixture, which takes the fuel a fraction of a second to catch up. In normal circumstances this would cause a faltering or hesitancy in the engine as the mixture is weakened. The accelerator pump therefore makes up for this by squirting in a stream of petrol. Thus nullifying the usual gasp, and contributing to the smooth throttle responses.

Considering the enduro styled drama of design that greets anyone first laying eyes on the XT the engine doesn't match and feels rather flat in performance.

Flat power curve

The test figures show that it reached 72.66mph prone inside 16.84 seconds, which puts its quarter mile terminal speed on a par with the XL250S. But whereas the XL250S and KL250 have reached their maximum within 400m, the XT wants to continue winding on slowly up to 80mph prone in top gear, squeezing every last drop out of its claimed 21bhp.

All of which suggests a rather flat power curve with not quite enough low down oomph to pop a cool easy wheelie. We'd enjoyed more torque effect with the Honda XL185S that we took on a trail jaunt across the Salisbury plains, which seemed to thrive on wheeling over the occasional log just by a mere blip of the throttle.

The only decent wheelies we could muster from the XT (and we've broken a few number plates in our time) were dropping-the-clutch ones. Anything else and it just didn't want to play. In spite of great tugs on the bars it just fell flat on its face, which we thought

may have something to do with the well damped rear suspension.

On with the dirt

Having proved its worthiness as a smashing road bike, the sort that would be ideal for a learner, we were keen to ride it off road and see how it fared in the mud — anyway it was a warm sunny day and we felt like making music with a few muddy puddles.

It seems that wherever there's a piece of land reserved as an off road play area it is swamped by high-pitched buzzing motocrossers carving out a circuit for themselves between the shrubs and trees.

As we quietly murmured into this hive of activity, the XT attracted quite a lot of attention, mostly from people who were checking that it was a 250, for it's not written on the side panel.

The XT didn't look so much out of place for, apart from the winkers and chromed bars, (which would look far more in keeping with the rest of the styling if they were matt black) it looks quite meaty and enduro-ish.

After a quick mosey round the moto-cross area which gave everyone a chance to do their thing and overtake me, I ventured off to the calmer sections where I could create my own circuit without being intimidated. I buzzed headlong into a series of undulations and was impressed with its ability to keep in a straight line. The front tyre was not trying to break away all the time and upset the steering as we'd found with the Honda. Once the XT was in motion over the bumps and hillocks the suspension got moving and the front wheel began to lift up over the jumps. This was fun.

Riding through some greenery later to cool off found me stuck in a muddy gully. The tyres were good, but not that good, and the foot pegs were up to their ears in gunge, which looked and smelt more like a very fresh cow pat than mud. I wasn't sure, so I grabbed the bars and the seat and dragged the XT out on its side, thankful that it wasn't a 500.

At 268lbs. the XT is one of the lighter 250 trail machines. Yamaha have made the most of plastic, for virtually any part that can be is — even the generator cover.

Sunshine Sammy

Our off road trail inevitable led us to the last word on trials machines... Sammy Miller.

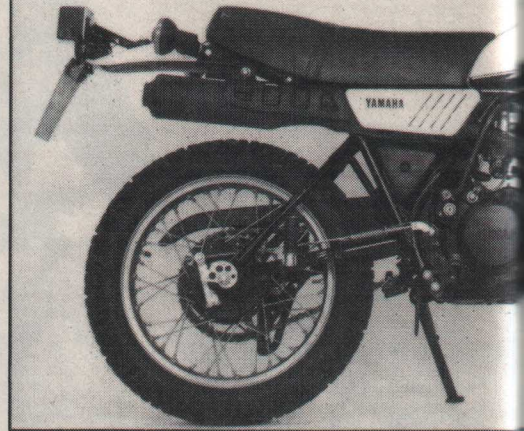
Donning his thick green Belstaff suit and wellies, he gave the XT a thorough going over, riding it on the road as well as on his off road haven.

He did not think much of the styling, feeling that the tank and white mudguards and side panels looked rather plain.

Like us he found the XT rather temperamental to start. Sometimes it would start first kick, sometimes it would take several. He suggested this was because four-strokes have a more sophisticated exhaust system. Because of the combustion and extractor waves built into the expansion box, carburation is far more critical, requiring a lean mixture, making the engine more fussy about starting when it was hot. Two-strokes generally start more easily.

He found the kick start lever quite amusing as it looks rather Heath Robinson as if someone had made it by hand but he couldn't deny that it tucked out of the way rather well. He also felt that the kickstarting stroke started too high up, adding to the

Yamaha prove that it's possible to have a high-level exhaust system without hanging the first bend in front of the sump



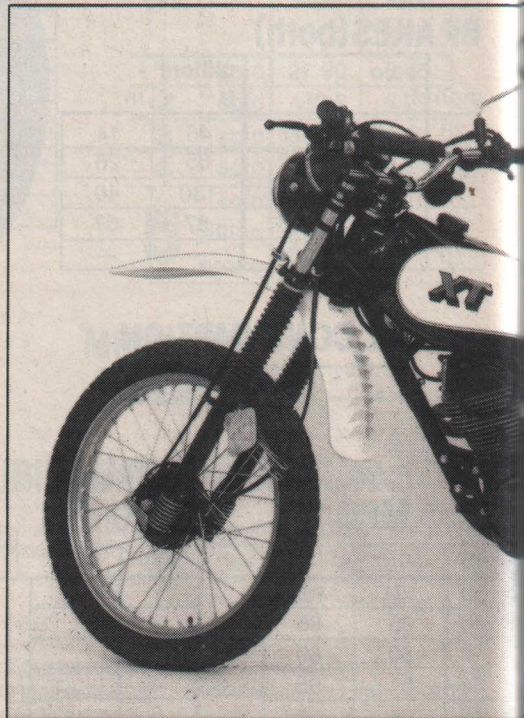
difficulties of starting — especially if it's being temperamental.

He liked certain touches such as the snail cam adjusters for quick and easy adjustment of the chain; and the chain tensioner which does away with chain snatch. He thought the rear sprocket looked rather flimsy and with serious trail riding would soon come to grief. He liked the gold anodised wheel rims, which are a big asset in winter, protecting the alloy from salt.

He agreed with us that the tyres offered better grip off road than the Honda tyres, though they would probably be more slippery on a wet road.

The frame and suspension design impressed Sammy. He thought the suspension was terrific, with a nice happy movement.

Clutch and gearbox were easy and smooth to operate he said, though as always the





TECHNICAL SPECIFICATION

Engine

Type: Air-cooled, SOHC, single cylinder, four-stroke.
 Bore x stroke: 75mm x 56.5mm.
 Displacement: 249cc.
 Compression ratio: 9.53:1.
 Carburettor: Single Mikuni VM28SS with accelerator pump.
 Max horsepower: 21hp @ 8000rpm.
 Max torque: 15ft. lbs. @ 6500rpm.
 Lubrication: Wet sump, 1.3lt. capacity.

Transmission

Type: Five speed, constant mesh.
 Clutch: Wet, multi-disc.
 Final reduction ratio: 2.87:1.
 Drive sprocket: 16 teeth.
 Wheel sprocket: 53 teeth.
 Drive chain: 98 links.

Frame and Forks

Frame: Diamond type, single downtube using engine as stressed member.
 Front forks: Telescopic, oil damped.

Rear suspension: Cantilever, with single adjustable shock absorber.

Wheels and Brakes

Front tyre size: 3.00-21-4PR.
 Rear tyre size: 4.60-17-4PR.
 F and R brake: Single leading shoe drum.

Electrics

Ignition: CDI Battery: 6V, 6Ah.
 Headlight: 35/35W. Rear light: 21/5W.
 Indicators: 17W.
 Warning lights: Turn, high beam, neutral.

Dimensions

Overall length: 2135mm (84in.).
 Overall width: 815mm (32in.).
 Overall height: 1170mm (46in.).
 Wheelbase: 1395mm (54.9in.).
 Seat height: 840mm (33in.).
 Ground clearance: 255mm (10in.).
 Dry weight: 121kg (268lbs.).
 Fuel tank: 8litres (1.75 galls).

COMPARISONS

	Speed prone	SS ¼ mile (prone)	Dry weight	Claimed bhp	mpg	Price inc. VAT
Yamaha XT250	79mph	16.84sec/72.66mph	268lb.	21 @ 8000	58	£899
Kawasaki KL250	81mph	16.76sec/80.20mph	280lb.	21 @ 8000	58	£849
Suzuki TS250ERN	83mph	16.63sec/79.82mph	267lb.	23 @ 6000	54	£750
Yamaha DT250	84mph	16.52sec/81.64mph	287lb.	23 @ 6500	50	£875
Honda XL250S	73mph	17.26sec/73mph	260lb.	20 @ 7500	61	£899

gearing is too high for off road use.

Summary

The XT250 is not going anywhere in the competition stakes as the power of the two strokes would eat it for breakfast. It is

simply a very pleasant on/off road bike, ideal for a learner with a gentle and controllable engine, good brakes and handling with such useful extras as an integral ignition/steering lock.

There's not a lot to choose between the XT, and its closest rival the Honda XL, except

that the handling is superior on the XT and you'd be stuck with the slippery 23in. front tyre on the Honda which cannot be replaced by anything better.

If I could swap the XT's engine for a two-stroke at £899 inc. VAT, I'd be very tempted.

Bob Goddard

Making the most of Yamaha's lead in monoshock technology, the XT250 is the first cantilever four-stroke in production



STAR RATINGS

Our Star system gives a quick reference to the standard reached in performance and engineering. The standard is:-

* = Poor; ** = Below average;
 *** = Average; **** = Above average;
 ***** = Outstanding.

Performance	***
Handling and Ride	*****
Servicing	*****
Engine	***
Transmission	*****
Frame and Forks	*****
Wheels and Brakes	*****
Electrics	*****
Dimensions	*****
Equipment and Finish	***
OVERALL RATING	*****

The

st single
cylinder,
monoshock
four stroke
two fifty.



Having established the XT500 as the U.K.'s premier "Thumper," Yamaha has now introduced the not-so-big single cylinder XT250. Learn on it if you like, but ride on it you must because this new machine epitomizes all that's best with such an uncompromising design.

Light weight single overhead camshaft engine with plenty of pull. Dual-purpose design, featuring Yamaha's unique monoshock suspension system which gives you easier control and safer riding, especially on green lanes.

Well chosen five speed gear ratios cope with high speed cruising and stuck-in-the-mud crawling.

Self cancelling indicators plus well-braced handlebars with centre padding for extra protection in case of a spill.

So if you thought that the XT500 was just a little too big for you or your pocket, here's the answer.

12 months
unlimited
mileage
warranty

NEW

XT250



The not-so-big four stroke single