



Roughing it up

Yamaha's DT175MX trail star tested by Brian Crichton

YAMAHA proudly claims that the DT175MX has established itself as Britain's best selling lightweight trail bike. In reaching this pinnacle of success the bike has acquired cult status.

Bred from the Yamaha YZ125 scrambler the monoshock two-stroke single presented itself as a vast improvement over its more conventional DT175 predecessor when it was introduced in 1978.

Three years on the 216lb charmer has undergone some minor surgery to reach its current level of development.

Since we first tested the model in our September 1978 issue the price has gone from £570 to £700 which you may consider to be quite reasonable in view of generally rising costs.

Basically the bike is little changed and most of what was said in the September '80 issue stands. The latest version has the familiar exhaust buzz, the same zippy engine, transmission backlash and meagre direct headlighting.

The fairly long suspension movement retains the front dive and rear end lift under heavy braking. And the trail tyres encourage you to push the bars down into a corner while remaining bodily more or less upright rather than leaning with the bike.

The long suspension movement for a compromise road/trail bike makes the DT175MX an excellent trail mount.

Its lack of weight, smooth flanks and generous ground clearance mark it as a serious contender for the off-road man.

Thoughtful touches like the quickly detachable rear wheel, snail cam adjusters, chain guide, chain tensioner, screw-on tank cap, serrated footpegs, fork gaiters, and tripmeter with one-tenth of a mile reset further enhance its purposeful design.

The Yamaha has had all these assets since its inception. So let's look at the new parts.

First, the most obvious is the square section swinging arm introduced in 1980. This gives the bike even more of a "works" look and is said to be considerably stronger than the previous tubular triangle.

But not all riders prefer it. Several owners like the tube type because of the extra clearance to allow scrambles tyres. They argue that with the wheel pulled right back there is just enough room to squeeze in a 4.00 x 18 moto cross tyre. With the square section swinging arm this is impossible.

Other easy to spot changes are the padded roll on the handlebar, new sidepanels, new graphics, and louvres in the front guard.



New square section swinging arm makes 3.50 x 18 trail tyre a close fit.

Removing the restyled sidepanels reveals that the air filter and two-stroke reservoir have swapped places, the filter now being on the left side.

It's still an oil-soaked foam cone, but the air route to the engine is more direct. This may help to partly explain a considerable increase in horsepower over the previous model.

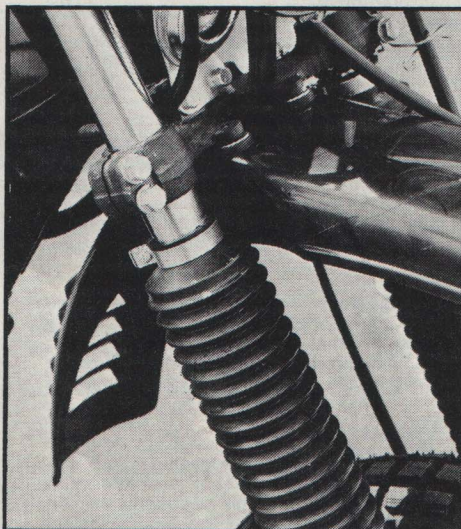
Yamaha do not claim any performance gain with this model. But LEDAR dyno figures show it to give more power and torque throughout the rev range over the example we had in 1978.

This is how the bhp figures compare:

| RPM | 1978 | 1981 |
|------|------|------|
| 4000 | 6.4 | 7.4 |
| 5000 | 8.8 | 10.3 |
| 6000 | 10.6 | 14.0 |
| 7000 | 12.0 | 14.9 |
| 8000 | 10.5 | 12.8 |

Maximum power figures are: 1978, 12.4bhp at 7400rpm; 1981, 15.0bhp at 7000rpm.

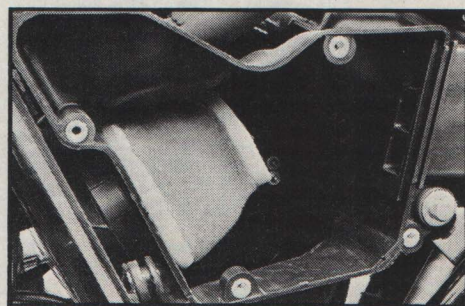
The staff at Yamaha I spoke to did not



Gaiters are standard and long enough to be pulled up flush with the lower yoke when forks are clamped in lowest position. Louvres in guard for engine cooling are new.



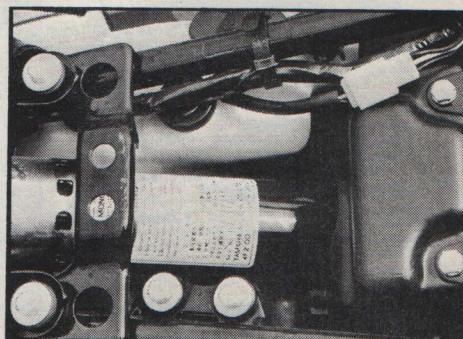
The DT175 is equally at home on the rough as it is on the road.



Air filter system and two-stroke oil reservoir have swapped sides on the new model.

know of any modifications to the seven-port engine. It may be that the test bike was a particularly good one. Whatever the explanation the power is up almost one-third at some stages and that's got to be good news.

So why is the top speed down? Good question. The gearing is still the same so the probable explanation for the 4mph deficit — 72.5mph to 68.23mph — is that the new bike was barely run-in for speed testing. A few more miles on the clock would probably have resulted in a better top speed.



De Carbon monoshock unit contains an oil chamber and nitrogen gas chamber separated by a floating piston. Spring preload is five-point adjustable. There were seven on the previous model.

On the other hand the time spent running in showed up as a bonus in fuel consumption with a best figure of 97.5mpg and an average of 79.7mpg.

The 1978 model was well run-in by the time we were allowed to ride it and the power was used to the full. It was ridden in a club enduro which brought consumption down to a worst of only 32mpg. The average worked out at 56mpg, while the best was 67mpg.

A few more miles and a little more time with the new model would have resulted in harder use and a lower consumption figure. At least our running-in illustrated that good economy can be obtained.

One of the first modifications carried out

after collecting the bike was to remove the seat strap. This allowed the rider to slide backwards and forwards for more comfort on the road and better control on the rough.

After 60 miles on the road the seat had become unbearable and I had to stop for a break. Obviously the bike is not intended for a lot of road use and if the slim seat were redesigned for more comfort it would detract from its properties as a trail seat.

Adjusting the monoshock spring preload can make a considerable difference to seat height. The forks can also be repositioned in the yokes. This gives owners of all shapes and sizes the opportunity to tailor the bike to their requirements.

Where Yamaha could upgrade the bike is

in the lighting department. The six volt direct headlighting throws a pencil beam with little improvement in spread on dip. Adapting the 12 volt system from their XT250 trail bike might be the answer.

A two-gallon fuel tank would be another improvement. At the moment you find yourself stopping more or less at gallon intervals to replenish the 1.5 gal tank.

But still the DT175MX is a prime choice for the rider wanting a lightweight best of both road and trail worlds. Deeply overlapped by racing development it is something of a cult bike satisfying allcomers from beginners, and commuters to off-road competition riders.

Test Specifications

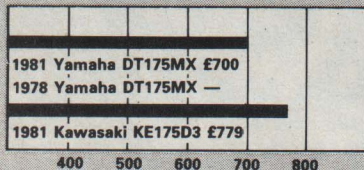
Yamaha DT175MX

Recommended retail price £700
Warranty 12 months unlimited mileage
Availability in most Yamaha dealers showrooms
Recommended servicing intervals — 300m (500km), 1000 (1500), 2000 (3000), thereafter every 2000 (3000).

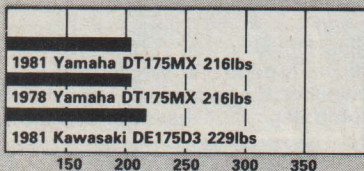
PERFORMANCE

Top speed (prone) 68.23mph (109.80kph)
Standing start 1/4 mile
17.48 secs at 68.23mph (109.80kph)
30mph top gear roll-on 1/4 mile
16.68 secs at 66.35mph (106.78kph)
Maximum speed in gears
at 8000rpm redline 1st — 16.90mph (27.20kph)
2nd — 27.80mph (44.74kph)
3rd — 39.30mph (63.25kph)
4th — 49.28mph (79.31kph)
5th — 56.16mph (90.38kph)
6th — 63.96mph (102.93kph)

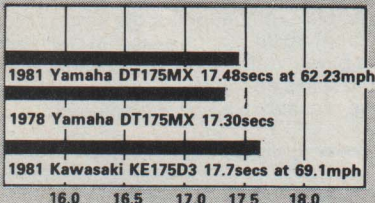
PRICE



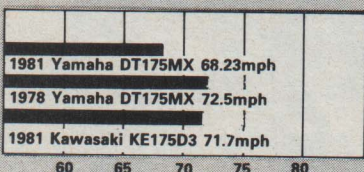
WEIGHT



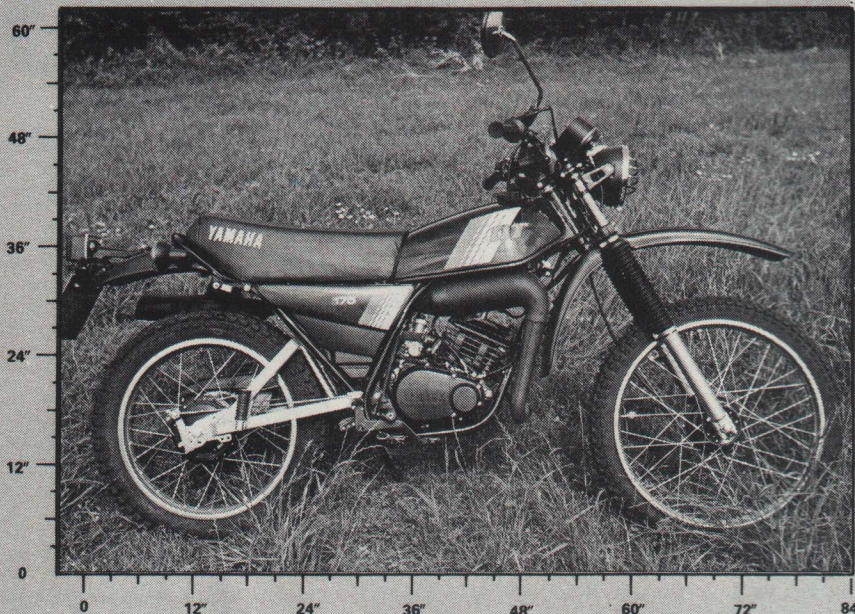
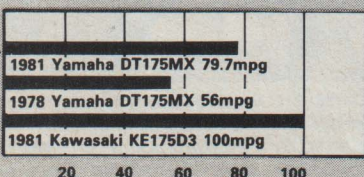
QUARTER-MILE TIME



TOP SPEED



AVERAGE FUEL CONSUMPTION



Engine rpm at 60mph (96kph) in top gear .. 7505rpm
Fuel consumption Best — 97.5mpg (34.4km/litre)
Worst — 69.0mpg (24.5km/litre)
Average — 79.7mpg (28.2km/litre)
Average tank range 110 miles (177km)

ENGINE

Type single cylinder air-cooled
two-stroke with reed valve
Bore and stroke 66x50mm
Piston displacement 171cc
Compression ratio 7.2:1
Exhaust system two-stroke expansion pipe
Lubrication Yamaha autolube
Starter kick

TRANSMISSION

Gears six-speed
Clutch wet multiplate
Primary drive gear
Final drive chain
Gear ratios. 1st — 33.55, 2nd — 20.38, 3rd — 14.42,
4th — 11.50, 5th — 10.09, 6th — 8.86.

CHASSIS

Type tubular single downtube with double
engine cradle
Suspension front — telescopic forks with 7.09in
(180mm) of travel; rear — swing arm with single
preload adjustable damper with 3.2in (80mm) of
travel.
Front tyre 2.75 x 21
Rear tyre 3.50 x 18
Front brake single leading shoe 5.12in
(130mm) diameter drum
Rear brake single leading shoe 5.12in
(130mm) diameter drum

DIMENSIONS

Wheelbase 53.1in (1350mm)
Length 84.4in (2145mm)

Seat height 33.3in (845mm)
Seat width 8in (203mm)
Footpeg height 11.5in (305mm)
Ground clearance 10.4in (265mm)
Weight 216lbs (98kg)
Fuel capacity 1.54gals (7.0 litres)
Oil capacity 0.19gals (0.9 litres)

ELECTRICS

Generator flywheel magneto
Battery 6 volt, 6Ah
Ignition capacitor discharge
Headlamp 35/35 5.5ins (152mm)

INSTRUMENTS

Includes: speedometer, odometer, tripmeter, rev
counter, helmet lock, indicator for high beam, oil
level warning light, indicator warning lights, neu-
tral light.

OTHER EQUIPMENT

Mirror, toolkit, handbook. Colours: black, red,
white.

IMPORTER

Mitsui Ltd, Oakcroft Road, Chessington Trading
Estate, Chessington, Surrey KT9 1SA.

TESTER'S VERDICT

Good points light, well designed, smart
Bad points poor lights, lack of fuel range
Performance zippy
Economy very good
Handling responsive and nimble
Comfort painful over 60 miles
Braking marginal
Equipment businesslike
Value hard to beat