

ON/OFF WINNER



YAMAHA DT 175 MX

Yamaha's sub-250cc trail bikes have always been amongst the most popular of the Japanese off-roaders, despite obvious concessions to road use at the expense of serious mudpluggability. But the new DT175 changes all that with a brand new mono-shock chassis, 6-speed gearbox and lots of trick stuff that we're more used to seeing on pukka enduro bikes. *Mark Williams* takes in turf 'n' tarmac to evaluate this transformed trailster.

One of the paradoxes of Japanese marketing is the way in which a manufacturer might fix a 'K', 'E' or 'Mk. 2' suffix to some vaguely updated model and promote it with the sort of frantic pride usually associated with an engineering breakthrough, yet the same manufacturer can let a drastically redesigned model quietly slip into the showrooms without nary so much as a change of designation or toot on the publicist's trumpet.

Yamaha have fallen between two stools in the case of their new DT175MX — they've amended the designation alright, but they've also wrought some dramatic changes amongst the machine's vitals. Much of the inspiration for the re-vamp comes from the successful YZ125 moto-crosser although the chassis itself owes more to the larger capacity DT mono-shockers than any whizz-bang competition bike.

The crankshaft/primary drive assembly is about all the 175MX shares with its predecessors' engines, for the all-black powerplant now has a higher comp. ratio, (6.8:1 compared to 6.2), radial finning, (liberally endowed with

rubber bungs to keep down noise), and a 6-speed transmission. Power output is now quoted at 15bhp, which is one horse *down* on the old model, but it peaks at 7000rpm instead of 6500 — which has its advantages on fast haul work through the gears. Quoted torque is also slightly down at 25.9ft/lbs at 6500rpm, but once again the extra gear more than compensates for any deficits here. Porting has been improved to smoothen the power-flow and the engine certainly *feels* a whole lot spunkier than of yore.

Like the porting, the transmission is the result of Yamaha's development of their hot-shot IT175 Enduro which sadly isn't available in this country, (although *Which Bike?* enduro team stalwart Peter Furlong rides an imported US model). In fact, many of the new bike's parts are interchangeable with the IT's, including the piston and gearshafts. The gears themselves are quite evenly spaced across the range, although second and third are perhaps closer than they need be, but the big news is that a broader spread of power mated to six cog box provides the DT175 with the urge to

Photography by Mark Williams

deal with just about any off-road terrain without running out of steam or pushing the revs too far beyond the 8000rpm bloodline.

Despite that eight thou red-line, the motor pulls strongly and cleanly up to 9000rpm or more in every gear but top. . . and without any evident strain. Fifth gear itself is good for about 72/73mph at 7500, beyond which it will not pull, but it does accelerate like the proverbial rocket up to 65mph and the same goes for the maxima in all the other gears, of course.

Unlike the IT175, the DT doesn't come 'on pipe' about halfway up the rev band, its power-flow being much smoother and its torque more evenly structured. This doesn't mean that you

can't lift the wheel easily in the first three gears though! The positioning of the folding footrests encourages a rearward seating position which helps the rider make the most of the fairly light front end — and of course the power delivery. In this respect the DT175 is far better balanced than its bigger bretheren and a cinch for squirting around fast, twisty routes where you never know what's coming up next.

At first the handlebars felt rather low in relation to the seat (and in terms of providing that vital bit of lift when pulling up the front end in a hurry), but I soon came to terms with what turned out to be a very commanding and effective riding stance.

When you *did* know what was coming up next, the DT could be slung around corners and over humps very quickly indeed. On the Bulth Wells scrambles course where a long,





steep and incredibly bumpy hill soon takes its toll of most Japanese trail bikes, the Yam bounded up like a frightened jack-rabbit and within half a dozen laps I was lopping fifteen, then twenty seconds off my best time on a DT400!

The clutch action is sweet and progressive, the wet, multi-plate clutch and geared primary drive do their job well — although neutral is harder to find than on previous DTs due no doubt to the somewhat crowded transmission housing — and the new one-piece kickstart still turns the engine when in gear with the clutch pulled in.

Then there's the chassis, a collection of well-integrated geometry and suspension items that makes a near-perfect marriage with the power unit. The cantilever frame we've already seen in DT250 and 400 guise, the last of which I found ill-matched to its Kayaba mono-shock absorber when I tested it last year (see issue No. 17). But the gas/oil unit hidden deep inside the upper frame work of the DT175 copes admirably with

the 8 inches of wheel movement offered by the bike's rear end. Nitrogen acts as an additional damper to the oil contained in the capacious twin-valve main reservoir, and the spring rate can easily be adjusted by removing the seat — in itself a fairly rapid operation.

The front suspension is similar to the IT set-up with almost 9 inches of travel, deceptively smooth damping and rubber gaiters to preserve the oil seals. Yamaha specify 10/20W oil for the front forks and the only reservations I had about the suspension, namely a tendency to jounce and occasionally bottom-out on *really* rough going, were dismissed after filling the fork legs with straight 20W Bel-Ray.

The combined package adds up to a highly responsive but well-mannered ride which keeps the power where you want it — on the ground — and keeps you firmly in the direction you aim to travel. The brakes match up to this well,

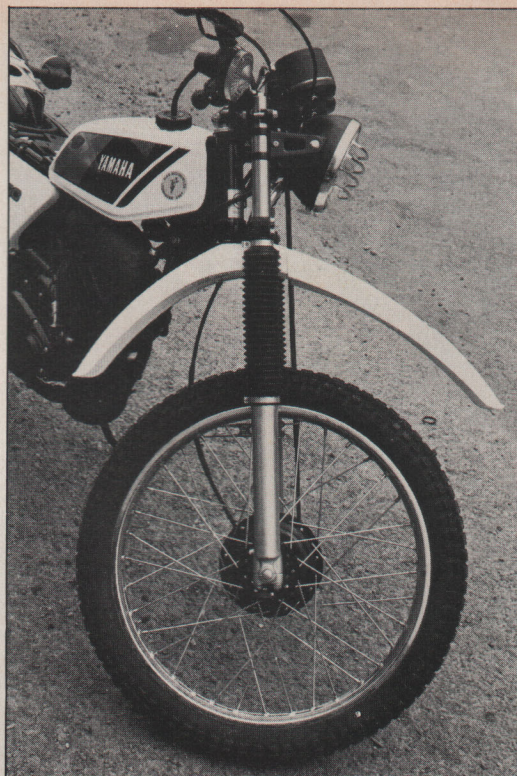
although the front-end dive common to most mono-shockers when the front anchor is applied somewhat purposefully may at first prove disconcerting to those unfamiliar with it. The back brake could be locked up on demand but not without deliberation, which made it ideal for helping the 55 inch chassis around tight corners.



Front forks (top) provide plenty of travel and almost enough damping (see text), and the brake is strong but not fierce. Overslung exhaust (below) is a tad vulnerable off-road, radially finned barrel/head improves cooling and rubber bungs keeps decibels down. Note semi-duplex frame and one-piece kick-start.

Yamaha have added numerous sensible bits and pieces to the DT175 including a spring loaded chain tensioner (just about essential with so much rear wheel movement), snail-cam chain adjusters and electronic ignition. I personally never had any trouble with the contact breaker system fitted to the earlier DTs, so I didn't notice any definite benefits during my test period, but I went a bundle for the oiled foam air filter in its capacious box and I appreciated the ease with which one can junk the battery in the interests of weight-saving. (The rubber stemmed trafficators came off fairly smartly too, but the man who only ventures off-road on the odd occasion may not want to bother with such perfidy).

The headlamp unit is housed in plastic and blessed with a rudimentary, (and ugly), stone-guard and malleable synthetics abound all over the place. The rev-counter and speedo sit in plastic, the fenders are naturally plastic, (although the rear one is heavily reinforced



with mild steel and not exactly designed to keep mud off the rider's back), as is the chain-guard, (adequate, for a change), and even the magneto cover.

Two most welcome diversions come in the form of an up-and-over exhaust system which resembles a moto-cross expansion chamber, until it reaches a silencer of blessedly modest proportions which nevertheless keeps the decibels down to a tolerable level, and the provision of security bolts in each wheel. The seat is decently comfortable too — even after a couple of hours fast blasting across the Black Mountains — although the pillion 'rests fitted direct onto the cantilever are somewhat of a token gesture as passengers are not very well catered for in the upholstery department.

Up until now my comments on the DT175



have related mainly to its off-road performance, but as a roadster it makes a better compromise than many others of its type. Firstly it's far more comfortable than one might expect of a trail bike and roadholding and handling are decidedly more positive than the skittish machinery offered by most manufacturers in this class. The braking characteristics mentioned earlier might prove unnerving initially, but take it from me those brakes work and work well.

Trials tyres, 6 volt lighting and a rather puny horn are not the ideal equipment for a roadster, but anyone buying a trail bike knowing that it's going to be used predominantly on the road should not have any qualms about such things. With a 1.5 gallon fuel tank and a surprisingly frugal 45.4mpg thirst, (after almost flat-out riding throughout our test), the DT175 should in fact appeal quite strongly as a road-and-occasional-trail machine.

As an outright off-roader, it offers performance and handling that approaches that of several very expensive enduro machines, but with comfort and relative docility thrown in gratis. A little port work and some judicious weight paring and the DT175 would in fact prove a competitive mount for any clubman enduro freak. As it is, this bike is the best 175cc Japanese trailbike I've yet ridden. By a long chalk.

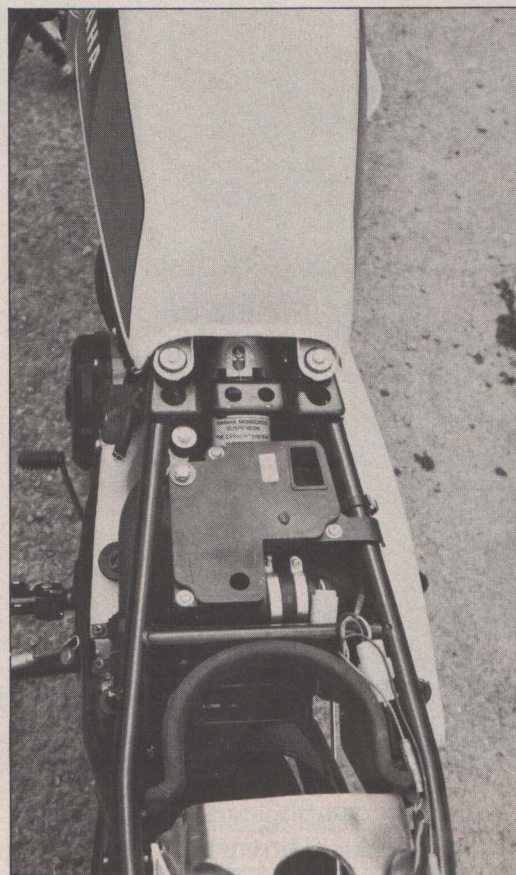
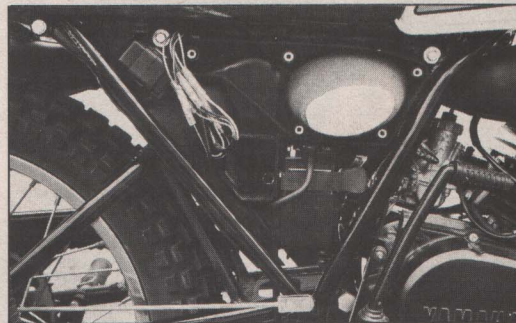
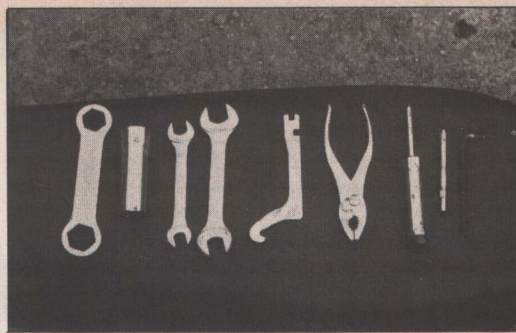
YAMAHA DT175 MX

Engine:	2-stroke single
Bore & Stroke:	66x50mm
Capacity:	171cc
Compression Ratio:	6.8:1
Carburation:	Mikuni 24mm
BHP @ RPM:	15 @ 7000
Primary Drive:	Gear
Clutch:	Wet, multi-plate
Gearbox:	6-speed
Electrics:	6v CDI/Flywheel Mag

DIMENSIONS:	
Wheelbase:	53in
Seat Height:	34in
Ground Clearance:	10in
Weight:	217lb
Fuel Capacity:	1.5gal

EQUIPMENT:	
Trafficators:	Yes
Electric Starter:	No
Trip Mileometer:	Yes
Steering Lock:	Yes
Headlight Flasher:	No
Price:	£570

Importers/ Concessionaires:	Mitsui Machinery Sales UK Ltd., Oakcroft Rd., Chessington, Surrey.
Supplied by:	G & S Motorcycles, Etnam St., Leominster, Herefordshire.



Tool-kit is straightforward and just about adequate for running repairs (top). However fitting it all in its box behind off-side panel (below) required mathematical precision and patience of Job. Oiled air-filter and easily removed battery were boons. CDI unit sits way up in top left corner. De Carbon-type mono-shock is adjusted by removing seat - a simple enough chore. Snail-cams are used to adjust the chain and there's a spring tensioner, too (bottom). Plastic oil tank swings out for easy filling, as on all DT/MXs.

