

# YAMAHA Enduro250MX



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# A dual - purpose enduro machine with a champion

It's still less than a decade since Yamaha decided to move into the world of motocross — and in that space of time have come three World Championships, numerous National Championships all over the world and a host of grand prix wins.

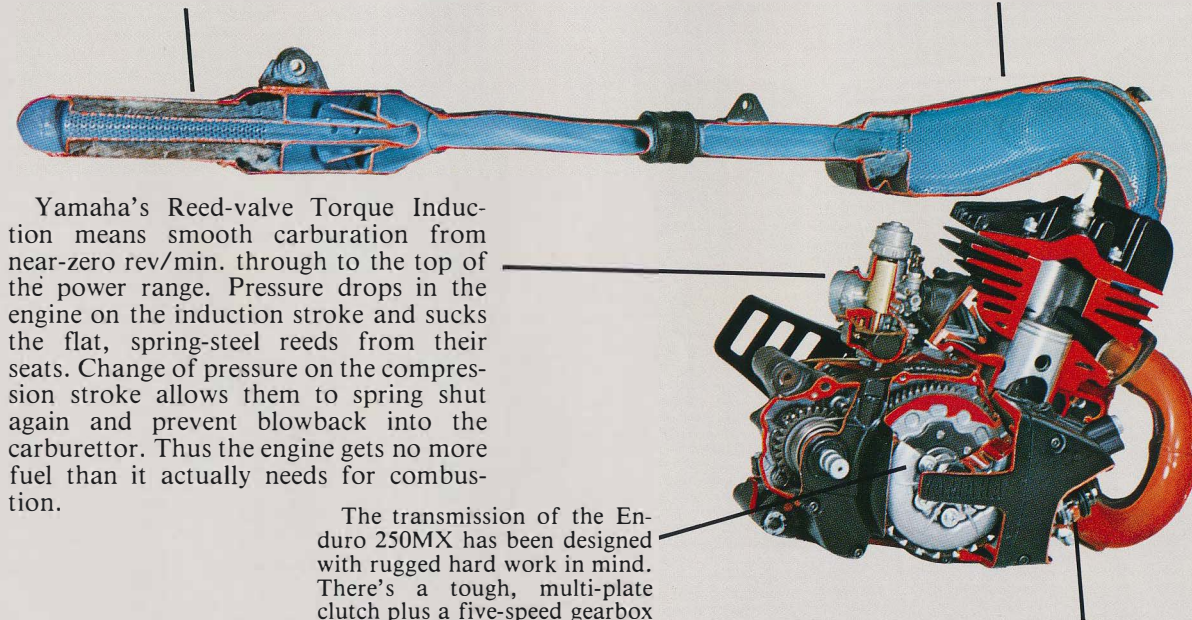
The first of those World Championships came when Hakan Andersson of Sweden won the 250 cm<sup>3</sup> title in 1973 and today's Yamaha Enduro 250MX is a direct descendant of that championship-winning machine.

From that first title winner has emerged one of the very best dual-purpose machines on (or off!) the road today.

It has been refined into a machine equally capable of carrying the rider to work six days a week or through the off-road rigours of even an event as tough as the International Six Days Trial!

Despite its sporting performance, the Yamaha Enduro 250MX is designed to keep the peace while still providing the rider with more than his fair share of excitement. The exhaust system has a built-in silencer that complies with all governmental and sporting organisation noise regulations.

The Enduro 250MX exhaust system includes an expansion chamber to extract maximum horsepower and torque from the two-stroke engine. The pipe is tucked well away from the rider-up and over the engine and crossing over above the rear sub-frame. High level routing keeps it well clear of rocks and so on.



Yamaha's Reed-valve Torque Induction means smooth carburation from near-zero rev/min. through to the top of the power range. Pressure drops in the engine on the induction stroke and sucks the flat, spring-steel reeds from their seats. Change of pressure on the compression stroke allows them to spring shut again and prevent blowback into the carburettor. Thus the engine gets no more fuel than it actually needs for combustion.

The transmission of the Enduro 250MX has been designed with rugged hard work in mind. There's a tough, multi-plate clutch plus a five-speed gearbox with straight-cut gears running in oil for constant lubrication. Gearbox ratios have been chosen so that the bike can cope equally well with the differing speed requirements of street or dirt riding.

Yamaha's "Autolube" was one of the pioneers of modern two-stroke lubrication and by now the name has become synonymous with reliability. Oil is contained in a tank separate from the petrol, then fed into the engine under pressure via a pump in the crankcase. A cable links the oil pump to the throttle twistgrip so that more oil is fed into the engine as the revs are increased.

The Yamaha Enduro models with their monoshock chassis, five-speed transmission and seven-port, two-stroke engines have proved their capabilities in Enduro events with 1st gold medals.

You can't do any better than that!

On or off the road, the Torque Induction and Autolube oiling guarantees smooth power with complete reliability.

As a street machine, the Enduro 250MX has all the comforts of the true road bike. Deep, well-contoured dual seat, easy-to-see, flashing turn signals, big, bright headlamp and full instrumentation.

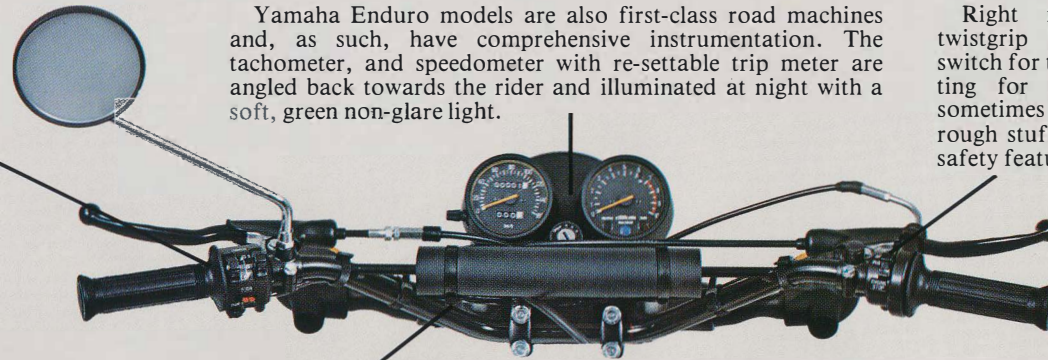
Wherever you ride the Enduro MX you can be assured of two things — enjoyment and excitement. On the road or off!





# onship pedigree — The Yamaha Enduro 250MX

Extra leverage from the Magura-style control levers means smooth clutch and brake action with less strain upon the rider's hands. Electrical control switches are on the handlebar grip boss — just a finger-tip away.



Yamaha Enduro models are also first-class road machines and, as such, have comprehensive instrumentation. The tachometer, and speedometer with re-settable trip meter are angled back towards the rider and illuminated at night with a soft, green non-glare light.

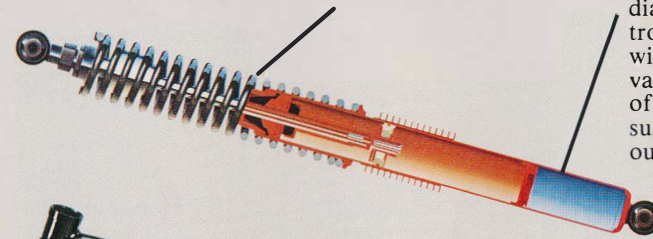
Right next to the throttle twistgrip is an emergency stop switch for the engine. It's a vital fitting for those sticky situations sometimes encountered out in the rough stuff and a decidedly useful safety feature on the road.

A handlebar-bracing tube strengthens the bars for off-road use. To guard the rider's face in the event of a fall Yamaha have included a protective padding around the brace on this year's Enduro models.

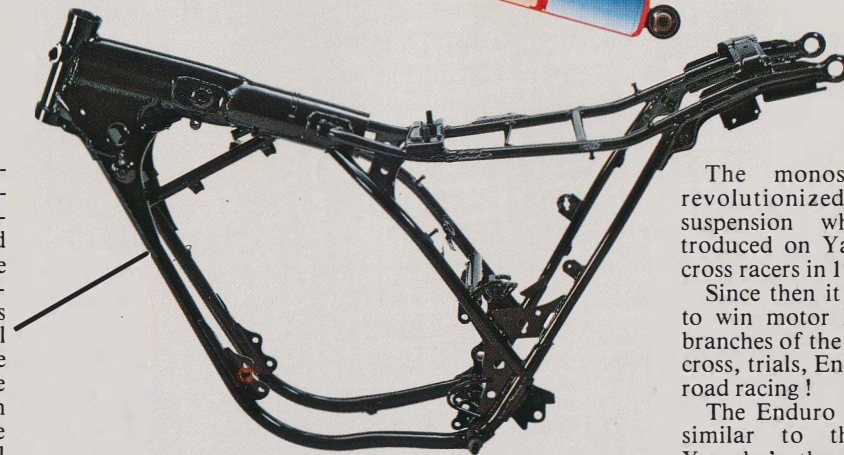
A single long shock absorber runs from the steering head to the rear sub-frame. At the top end of the damper, it is possible to adjust the capabilities of the unit via simple pre-load tension on the spring and this means that the Enduro suspension can be tuned to suit the rider's own requirements.

Damping medium for the shock absorber is a combination of both gas and oil. A cell of nitrogen is contained in the base of the unit under the extremely high pressure of 213 lbs per square inch.

Separated from the oil by a diaphragm, this gas actually controls the flow of damping oil without the need for complicated valving. It's presence in the base of the unit also means that the suspension can never "Bottom out".



The rear wheel is carried in a rigid, triangulated sub-frame and the entire rear end moves up and down with the wheel. The weight transfer of acceleration and braking is better with the long-travel monoshock system so the bike maintains a more level posture over rough going. Additionally, the long suspension travel allows the rear wheel to follow the bumps rather than hop over them. This gives a smoother, easier-handling ride and more traction.

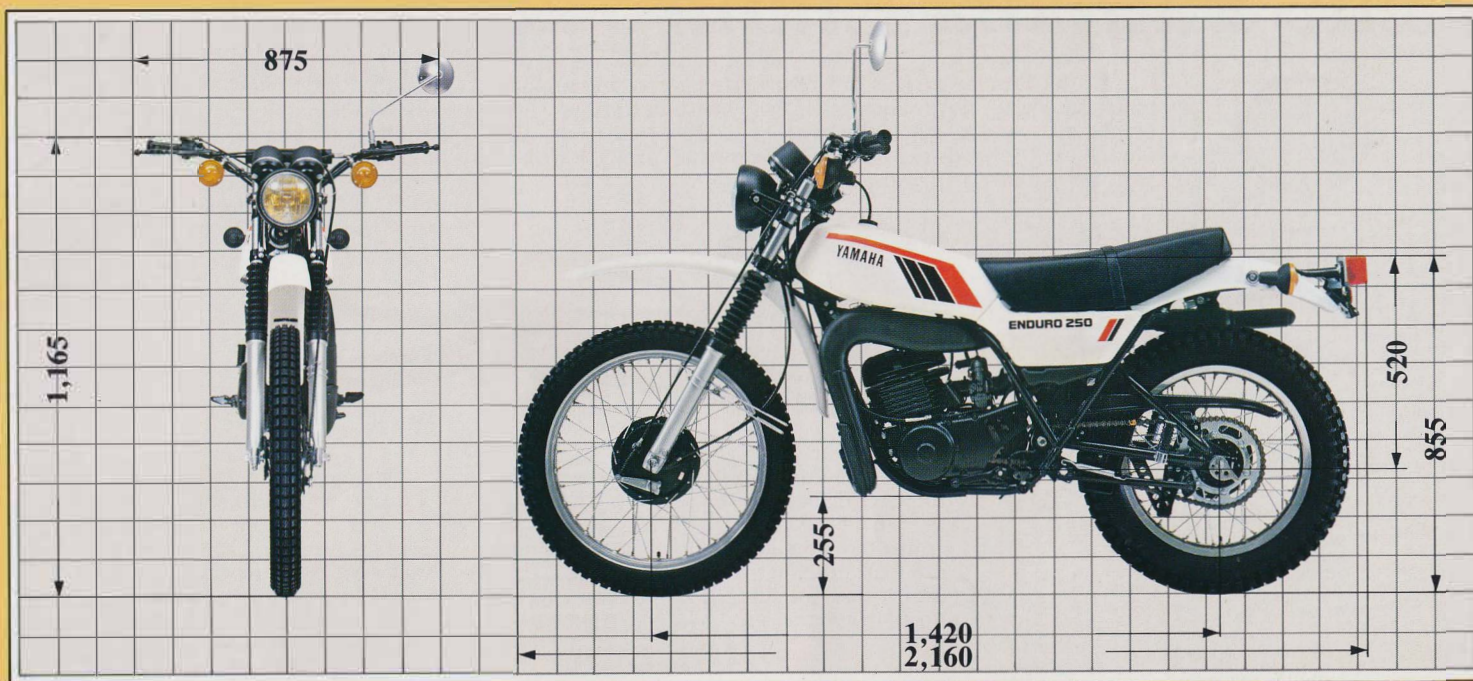


The monoshock chassis revolutionized motorcycle suspension when first introduced on Yamaha's motocross racers in 1973.

Since then it has been used to win motor honours in all branches of the sport — motocross, trials, Enduros and even road racing!

The Enduro chassis is very similar to that used by Yamaha's three world motocross championship winners — Hakan Andersson (250 cm<sup>3</sup>) in 1973 and Heikki Mikkola (500 cm<sup>3</sup>) in 1977 and 1978. Main loop is a strong twin downtube cradle frame.





**Enduro250MX  
SPECIFICATIONS**

**ENGINE**

Type . . . . . 2-stroke, Torque Induction,  
Single

Displacement . . . . . 246 cm<sup>3</sup>

Bore & Stroke . . . . . 70.0 × 64.0 mm

Compression ratio . . . . . 6.7 : 1

Max. horsepower . . . . . 16.9 kW (23.0 HP)  
@6,000 rev/min.

Max. torque . . . . . 27.5 Nm (2.8 kg-m)  
@5,500 rev/min.

Lubrication system . . . . . Autolube

Starting system . . . . . Primary kick starter

Primary transmission . . . . . Gear

Final transmission . . . . . Chain

Gearbox . . . . . 5-speed

Carburettor . . . . . VM28SS

Clutch . . . . . Multi-plate, Wet

Battery . . . . . 6V, 6AH

Charging system . . . . . Flywheel magneto

Ignition type . . . . . Magneto, CB/Coil

**DIMENSIONS**

Overall length . . . . . 2,160 mm

Overall width . . . . . 875 mm

Overall height . . . . . 1,165 mm

Wheelbase . . . . . 1,420 mm

Min Ground clearance . . . . . 255 mm

Seat height . . . . . 855 mm

Front fork travel . . . . . 195 mm

Rear wheel travel . . . . . 140 mm

Weight (net) . . . . . 118.5 kg

Fuel tank capacity . . . . . 9.0 lit.

Oil tank capacity . . . . . 1.1 lit.

Tires front . . . . . 3.00-21-4PR

rear . . . . . 4.00-18-4PR

Brakes front . . . . . Drum

rear . . . . . Drum

*\*Specifications subject to change without notice.*



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