

TY250C YAMAHA TRIAL



YAMAHA
It's a way of life.



The one to watch at the trials events

He's talking about Yamaha's TY250C.

And he should know what he's talking about. Born in Britain, this remarkable sport is sweeping the world. It demands great skill, absolute balance, strength and stamina. And a machine to match. This is it. Working directly with Yamaha in Japan, Mick Andrews helped develop this machine, his skill and experience being invaluable in such matters as machine power-to-weight characteristics, the slim design, and the special design of the flywheel and crankshaft mass for top performance trials. And for a bike that will literally stand on its tail, Yamaha has developed specially adjustable rear shocks and responsive front forks. Trial riding is more than a sport, it's a way of life...and Yamaha has developed the machine for it.



TY250C

PERFORMANCE

Min. turning radius 1,600 mm
Min. braking distance 15 m @50 km/h

ENGINE

Type2-stroke, 7-port, Torque Induction® Single
Displacement 246 cc
Bore & Stroke..... 70×64 mm
Compression ratio 6.0 : 1
Max. torque..... 2.1 kg-m @5,500 rpm
Lubrication system..... Autolube
Starting system Primary kick starter
Transmission 5-speed gearbox

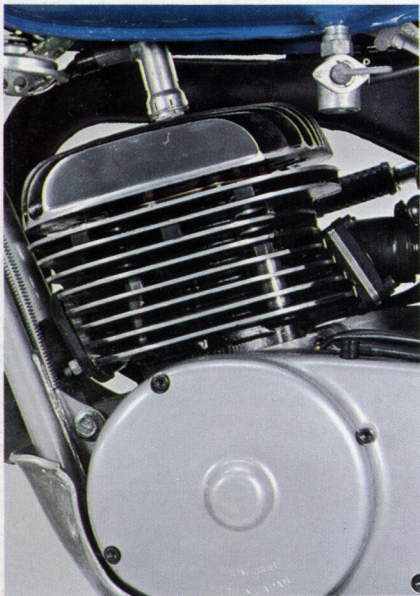


DIMENSIONS
 Overall length 1,985 mm
 Overall width 835 mm
 Overall height 1,110 mm
 Wheelbase 1,295 mm
 Min. ground clearance 280 mm
WEIGHT (NET) 93 kgs.
FUEL TANK CAPACITY 5.0 lit.

OIL TANK CAPACITY 0.35 lit.
TIRES front 2.75-21-4PR
 rear 4.00-18-4PR
COLORING White/French Blue

** Specifications subject to change without prior notice.*

Features



Engine

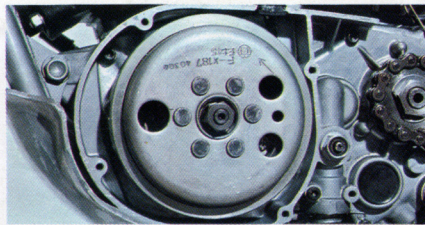
The powerful, 2-stroke, 246-cc, 7-port, Torque Induction® engine has been specially modified for smooth ultra-low-speed operation with a heavier flywheel magneto assembly. And to assure optimum throttle response, the reed-valve assembly positively purges the engine of burned gases while supplying fresh fuel on demand to meet all engine operating conditions. Also, the engine fin area has been increased for better heat dissipation and, therefore, more stable engine operation.

Autolube®

In order to eliminate the need for mixing the gasoline and oil, the TY250C includes the Autolube system, a YAMAHA-original mechanism which continually monitors the throttle opening and engine speed to automatically supply exactly the right amount of oil from a separate tank. Besides not requiring the oil and gasoline to be mixed manually and since precisely the right amount of oil is added to the gasoline at all times, the engine is naturally cleaner burning, and, therefore, its serviceable lifetime is much longer.

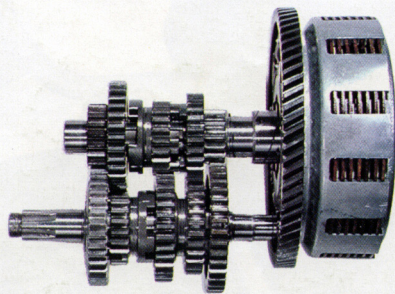
Caburetor quick-change lever

The carburetor of the TY250C has a quick-change lever which changes the fuel-air mixture for optimum engine operation when riding on ordinary roads in between the sections. Regardless of the layout of the trials event, the engine is able to continually operate at peak efficiency with this quick-change device.



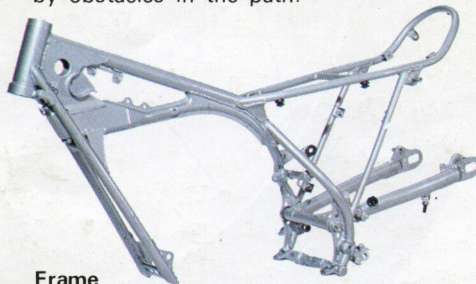
Flywheel and magneto

Because a trials machine is operated at very low speeds for the most part, the engine must be able to operate smoothly and not stall even at slow-walking speeds. This smooth operation is attained on the TY250C by the large flywheel and magneto mass so that their inertial force at low speeds will counteract the pulsing force due to the combustion stroke. Also, this mass has been critically selected so that the machine will still maintain good throttle-response characteristics.



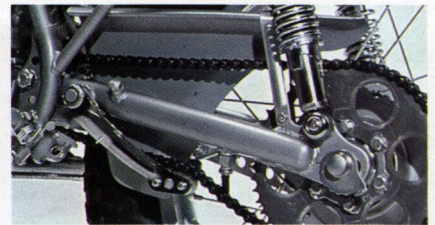
Transmission

The TY250C utilizes a 5-speed transmission so that, while riding through a trials section, first, second and possibly third can be used with a comfortable overlap so that fewer shifts are required while the most efficient use of the machine's power band is realized. Fourth and fifth gears are included so that the machine can operate more smoothly in between sections or down an open road. Also, the shift-lever pedal is a spring-loaded, 45°-angle, fold-away type so that it will not be knocked out of gear if hit by obstacles in the path.



Frame

The TY250C utilizes an extra-durable diamond-type design. This frame design features a more slender tube, through the use of high-tensile-strength steel, to attain a lighter frame without sacrificing any of the machine's ability to withstand severe punishment. Also, the geometrical form of the diamond frame is ideally suited to withstand large stresses and strains encountered from any direction while maintaining overall machine stability.

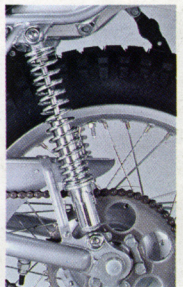


Chain tensioner and oiler

In order to prevent the chain from back-lashing when the engine is suddenly accelerated, a spring-loaded tensioner is attached to the rear swing-arm to maintain a constant chain tension. Also, one side of the rear swing-arm is utilized as an oil reservoir which drips oil on the chain, increasing the lubrication factor for the chain, and thereby increasing the chain's serviceable life.

Rear shock absorbers

The rear shock absorbers on the TY250C are a single-spring, hydraulically-damped, adjustable type so that the rider can quickly adjust the tension of the rear springs to more adequately match the section to be ridden. This type shock absorber has long been noted for its excellent cushioning characteristics which help reduce rider fatigue and allow maximum maneuverability while maintaining a stable machine attitude.

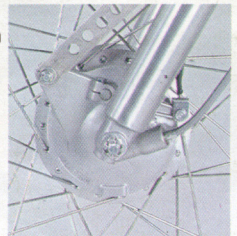


Skid plate

To protect the under portion of the engine from damage due to rocks, stumps and other hazards which are likely to be encountered on any trials riding section, a tough aluminum plate has been attached to the under side of the machine. Also, this plate helps prevent mud build-up around the engine which could decrease engine efficiency due to over-heating.

Brakes

The brakes, both front and rear, feature a special labyrinth-seal design which prevents water and dust from entering the drum and affecting the operation. These brakes are a magnesium, die-cast construction to further reduce the unsprung weight of the machine, and have ample heat-dissipating capability so that the brakes will not fade even after repeated use. The foot-brake lever has been changed to a spring-loaded, fold-away type in order to prevent damage if it should happen to strike some obstacle in the path.



YAMAHA



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