

DT125LC—THE NEW APPROACH TO OFF-ROAD RIDING

The DT125LC demonstrates once again Yamaha's unique talent for designing and building motorcycles which are always one step ahead of their rivals in performance, style and technical innovation. This sort of success comes only from Yamaha's policy of designing new models from the ground up.

Thanks to that policy, the DT125LC has an all-new engine bristling with Yamaha's latest race-technology. Like Yamaha's Grand Prix winning YZ Motocrossers, the DT125LC uses liquid cooling for its single cylinder. Only by the adoption of liquid-cooling, which ensures a constant operating temperature, can the engine release its full power-potential. Incredibly, this new engine, complete with its lightweight aluminium radiator and high-capacity water pump, actually weighs less than its air-cooled predecessors.

Inside the engine

there are more examples of Yamaha's advanced design technology. A gear driven counter-balance shaft dramatically cuts down engine vibrations allowing the use of a much lighter yet stronger cradle frame. The YEIS (Yamaha Energy Induction System), a simple yet ingenious device in the inlet tract, eliminates the "peaky" power delivery that is a common criticism of high performance two-stroke engines. By smoothing out the flow of incoming fuel vapour, the YEIS gives the engine a wider power band, the sort of smooth power delivery that is so important for off-road riding. The YEIS achieves this without reducing peak power output or increasing fuel consumption.

Like the engine, the sophisticated suspension system clearly reveals its racing heritage. The long-travel front forks are of the

leading-axle design for precise steering in the rough; and Monocross rear suspension with its rigid box-section swing arm ensures a positive grip and confident handling. It is perhaps the fine attention to detail, however, that most reveals Yamaha's single-minded dedication to building the ultimate off-road motorcycle. The luxuriously padded seat overlaps the fuel tank to provide greater comfort and protection. A roll-up type, competition twist grip is fitted to ensure smooth throttle action in all weather conditions. Dog-leg control levers give easier operation. And the front fork tubes are protected by rubber stone guards. There are a hundred more practical details like these, but the only way you'll really find out just how good Yamaha's new DT125LC is, is to ride one.



readout at all times. Included are a speedometer with

plus a water temperature gauge.

odometer and trip counter, a complete set of indicators,

Liquid cooling system

Recovery tank

As the engine starts, an integral water pump in the crankcase is driven by the primary gear on the crankshaft. This pump sends the cooling liquid into the water iacket around the cylinder and cylinder head. Engine heat is thus absorbed by the cooling liquid as it passes through the water jacket. The heat is then dissipated into the atmosphere via the radiator.

This improved heat dissipation allows the engine to be driven harder for longer periods, which brings higher

Carburettor

ankcase

Carburettor

power with greater stability.

The DT125LC's liquid cooling system offers more: compact design and light weight, reduced cooling liquid maintenance by the adoption of a recovery tank, lowered mechanical noise, etc.

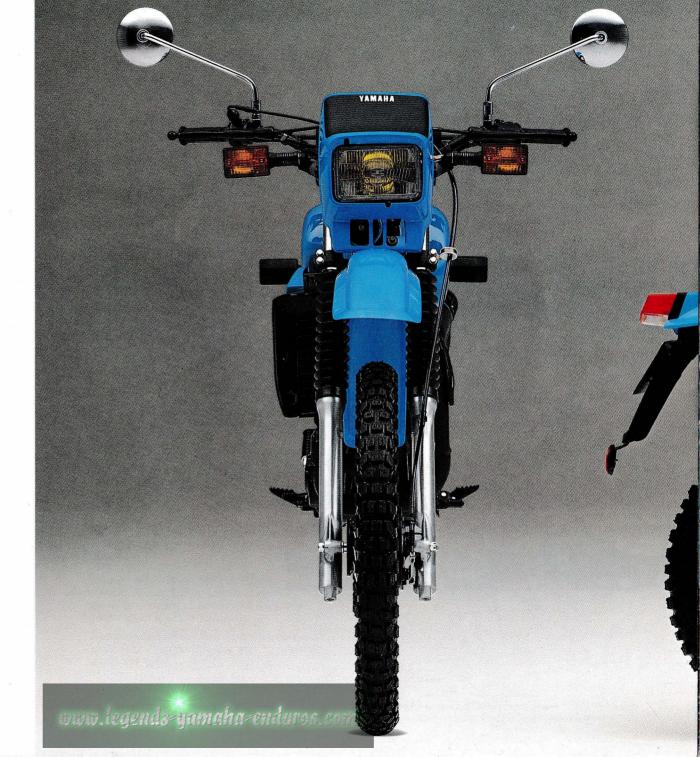
Yamaha Energy Induction System

Chamber

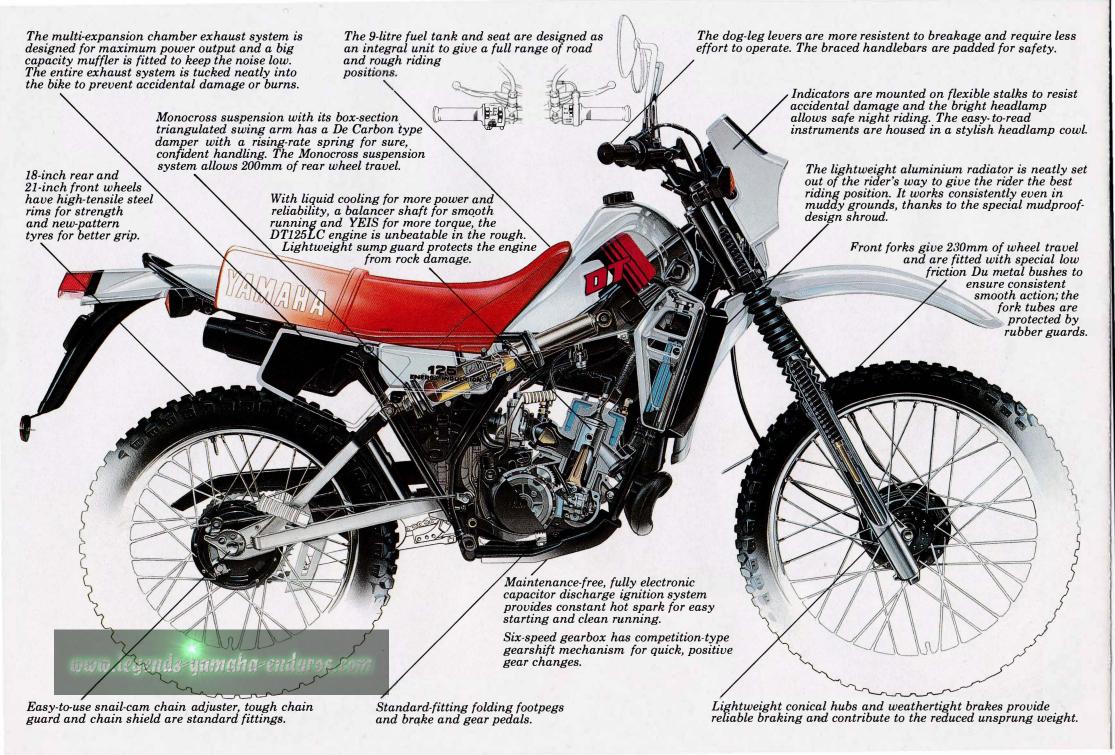
fuel economy.

In a two-stroke engine, the piston compresses the air/fuel mixture in the crankcase as it moves downward, and this pressure closes the reed valve. While the valve is shut, the mixture flows into the intake duct, making the pressure in the intake duct higher than that in the YEIS chamber. This difference in pressure guides the mixture into the chamber, so the flow of the mixture passing through the carburettor becomes smooth and consistent.

> As the piston moves upward, negative pressure is generated in the crankcase which opens the reed valve, followed by newly generated negative pressure in the intake duct, drawing the stored mixture out of the chamber. Along with the supply of fresh mixture from the carburettor, this flow of mixutre improves the engine's intake efficiency by smoothing out the intake flow and making it consistent, while fascilitating the ideal carburettor setting.
>
> As a result, the YEIS gives flatter, greater torque delivery at low and mid speed ranges along with improved









DT125LC SPECIFICATIONS ENGINE

Type 2-str	oke, liquid-cooled,
	Induction, single
Displacement	123 cc
Bore and stroke	56.0 x 50.0 mm
Compression ratio	
Max.power (DIN)	16.2 PS (11.9 kW)
	@7,000 rpm
Max.torque(DIN)1	.7 kg-m (16.3 Nm)
	@7,000 rpm
Lubrication	Autolube
Carburetion	VM24
Ignition	CDI
Starter system	Kick
Fuel tank capacity	
Oil capacity	1.0 l
Transmission	6-speed
Final transmission	Chain drive
CHASSIS	
Overall length	2,135 mm
Overall width	820 mm
Overall height	
Seat height	
Wheelbase	
Ground clearance	270 mm
Dry weight	97 kg
Suspension	
Front	Telescopic forks
Rear Mon	ocross suspension
Brakes	
Front/Rear	Drum
Tyres	
Front	
Rear	4.10-18-4PR

Because of our ongoing efforts to make Yamaha motorcycles even better, specifications are subject to change without notice.