

DT125LC



DT125LC—THE NEW APPROACH TO OFF-ROAD RIDING

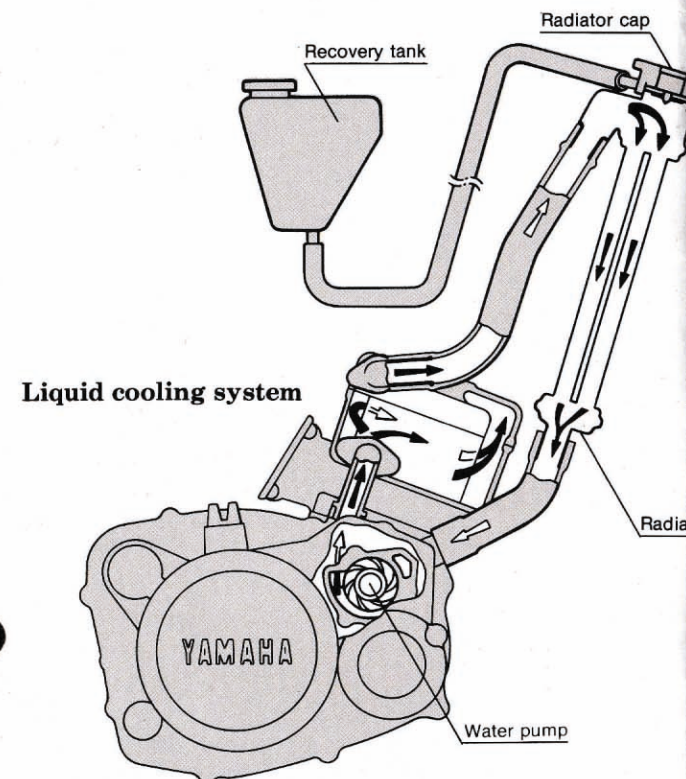
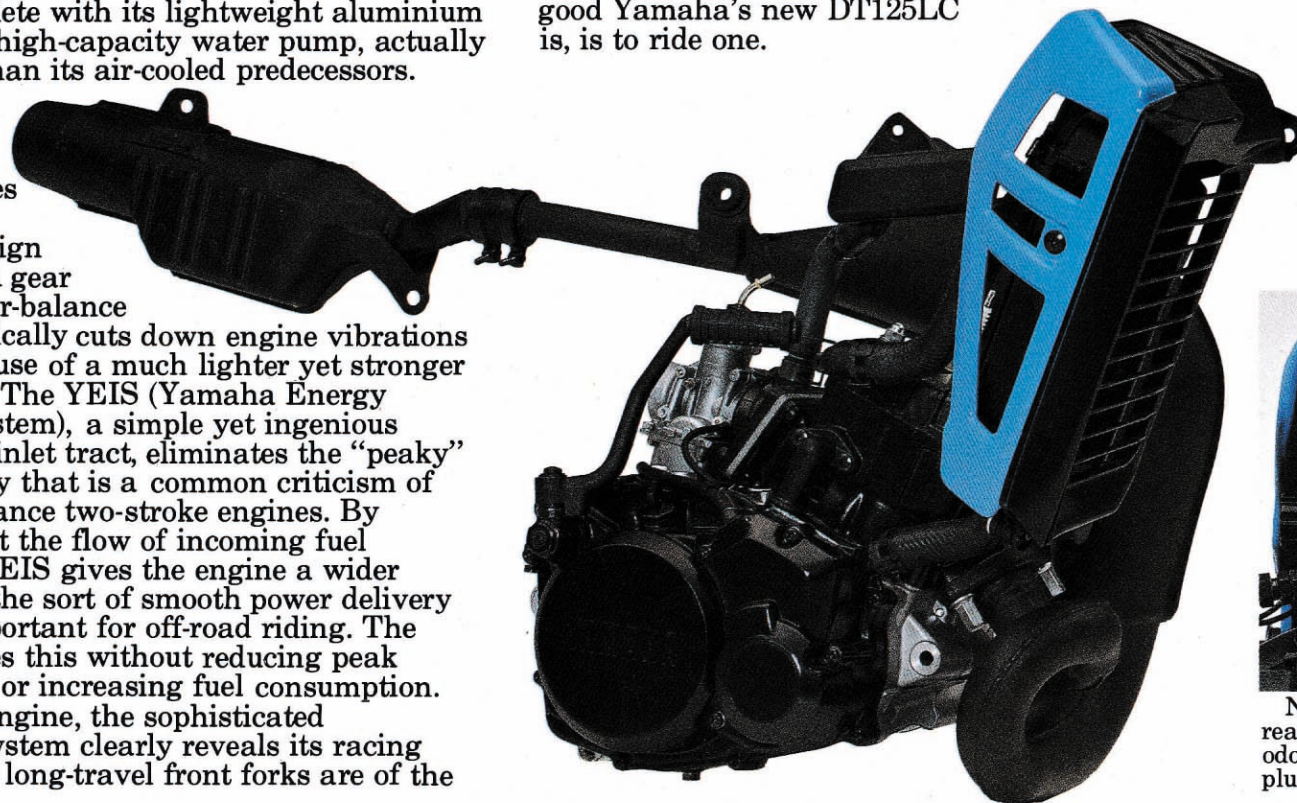
The DT125LC demonstrates once again Yamaha's unique talent for designing and building motorcycles which are always one step ahead of their rivals in performance, style and technical innovation. This sort of success comes only from Yamaha's policy of designing new models from the ground up.

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-axe 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.



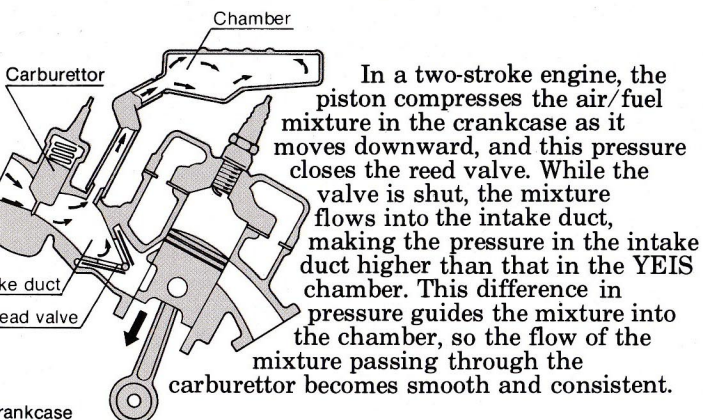
Neatly arranged instruments assure easy, accurate readout at all times. Included are a speedometer with odometer and trip counter, a complete set of indicators, plus a water temperature gauge.

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 jacket 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.

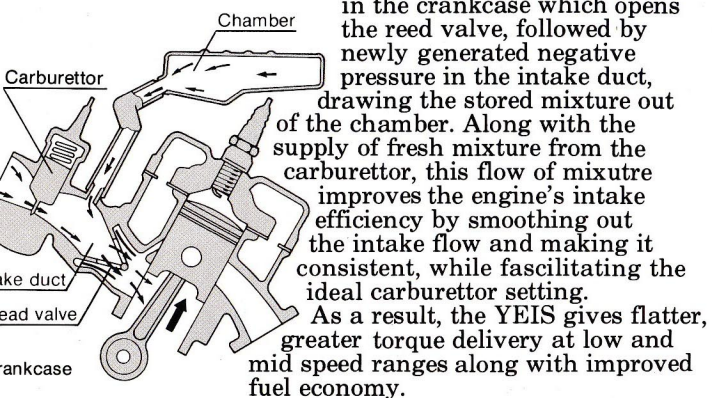
This improved heat dissipation allows the engine to be driven harder for longer periods, which brings higher power with greater stability.

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



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 mixture improves the engine's intake efficiency by smoothing out the intake flow and making it consistent, while facilitating the ideal carburettor setting.

As a result, the YEIS gives flatter, greater torque delivery at low and mid speed ranges along with improved fuel economy.





The multi-expansion chamber exhaust system is designed for maximum power output and a big capacity muffler is fitted to keep the noise low. The entire exhaust system is tucked neatly into the bike to prevent accidental damage or burns.

The 9-litre fuel tank and seat are designed as an integral unit to give a full range of road and rough riding positions.

The dog-leg levers are more resistant to breakage and require less effort to operate. The braced handlebars are padded for safety.

Monocross suspension with its box-section triangulated swing arm has a De Carbon type damper with a rising-rate spring for sure, confident handling. The Monocross suspension system allows 200mm of rear wheel travel.

18-inch rear and 21-inch front wheels have high-tensile steel rims for strength and new-pattern tyres for better grip.

With liquid cooling for more power and reliability, a balancer shaft for smooth running and YEIS for more torque, the DT125LC engine is unbeatable in the rough. Lightweight sump guard protects the engine from rock damage.

Indicators are mounted on flexible stalks to resist accidental damage and the bright headlamp allows safe night riding. The easy-to-read instruments are housed in a stylish headlamp cowl.

The lightweight aluminium radiator is neatly set out of the rider's way to give the rider the best riding position. It works consistently even in muddy grounds, thanks to the special mudproof-design shroud.

Front forks give 230mm of wheel travel and are fitted with special low friction Du metal bushes to ensure consistent smooth action; the fork tubes are protected by rubber guards.

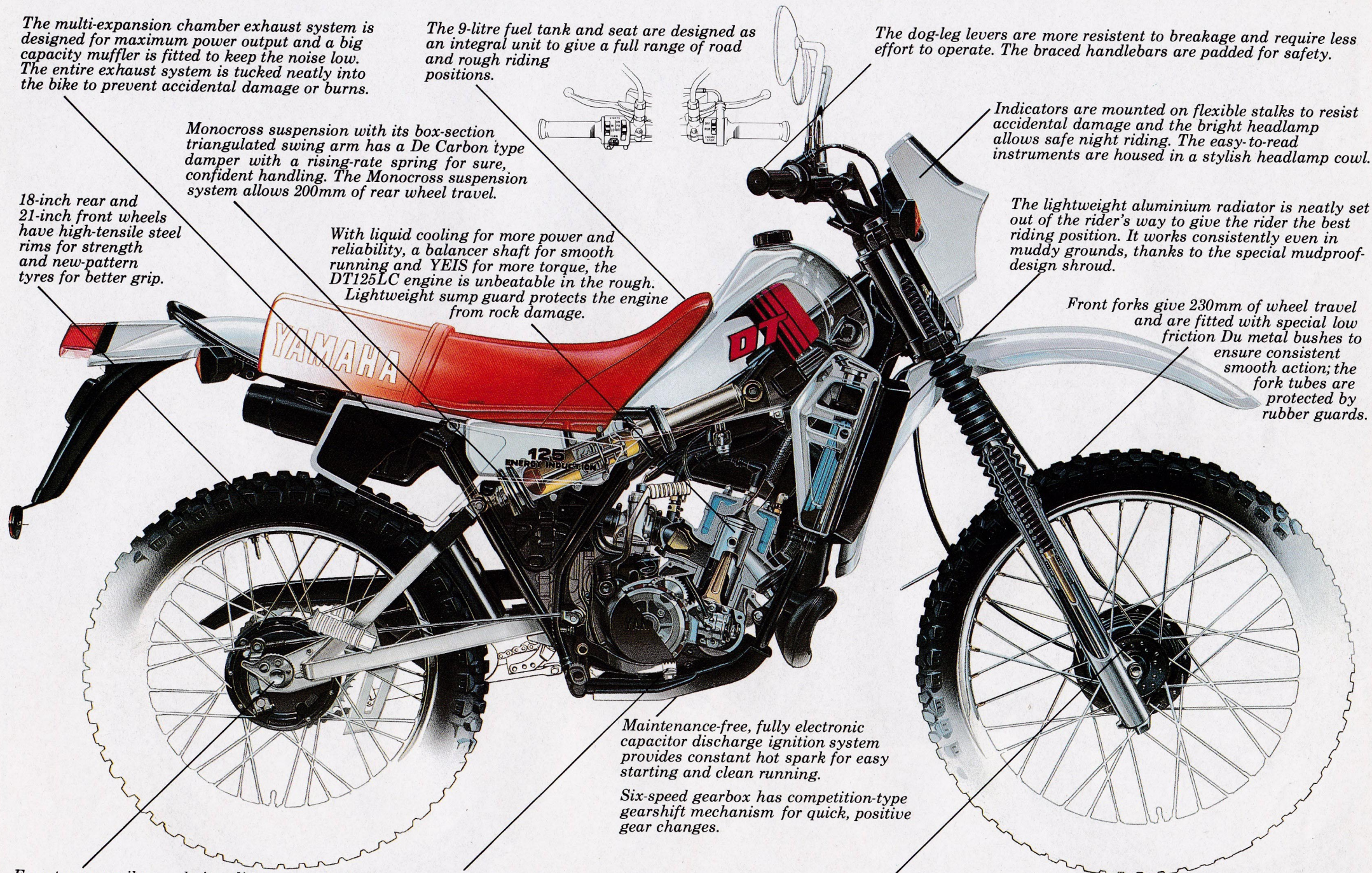
Maintenance-free, fully electronic capacitor discharge ignition system provides constant hot spark for easy starting and clean running.

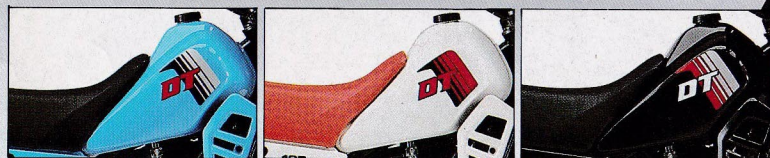
Six-speed gearbox has competition-type gearshift mechanism for quick, positive gear changes.

Easy-to-use snail-cam chain adjuster, tough chain guard and chain shield are standard fittings.

Standard-fitting folding footpegs and brake and gear pedals.

Lightweight conical hubs and weathertight brakes provide reliable braking and contribute to the reduced unsprung weight.





DT125LC SPECIFICATIONS ENGINE

Type 2-stroke, liquid-cooled,
Torque Induction, single

Displacement 123 cc

Bore and stroke 56.0 x 50.0 mm

Compression ratio 7.2 : 1

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 9.0 l

Oil capacity 1.0 l

Transmission 6-speed

Final transmission Chain drive

CHASSIS

Overall length 2,135 mm

Overall width 820 mm

Overall height 1,195 mm

Seat height 840 mm

Wheelbase 1,345 mm

Ground clearance 270 mm

Dry weight 97 kg

Suspension

Front Telescopic forks

Rear Monocross suspension

Brakes

Front/Rear Drum

Tyres

Front 2.75-21-4PR

Rear 4.10-18-4PR

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



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