

XT600Z TÉNÉRÉ



YAMAHA XT600Z TÉNÉRÉ—CONQUEROR OF AFRICA AND NUMBER ONE IN EUROPE.



When a machine as apparently far-removed from the mainstream of motorcycling as the Yamaha XT600Z Ténéré becomes undisputed one of the top-selling machines in Europe, people start looking for reasons why.

They don't need to look too far!

For starters, the Ténéré is not so far out of the mainstream as its rugged appearance suggests. As well as being one of the ultimate off-road racers, it's also a superb street machine. Easy electric starting (new for 1986) and a solid combination of hard acceleration, high cruising speed and fuel efficiency are provided by the lusty 600cc single-cylinder, four-stroke engine, with its unique twin-carburettor Yamaha Duo Intake System.

At least as equally important, is the fact the bikes just don't look any tougher or more exciting than the Ténéré. And its distinctive looks are backed up by an impeccable off-road competition pedigree. Yamaha's XT enduro four-strokes have conquered Africa... being developed through ten years of success in desert classics like the Paris-Dakar marathon or the Rally of the Pharaohs.

The 1986 XT600Z Ténéré is the final embodiment of that development. It's almost

an exact replica of the factory team racers, uprated in both engine and chassis departments from last year's model. Power has been increased by a new camshaft, cylinder head changes that include re-profiled ports and combustion chamber, bigger valves and a larger secondary carburettor.

Handling improvements have been effected mainly by concentrating on lowering and centralising the machine's weight mass. Several weighty components have been relocated around the centre point of the bike, including oil tank, battery and toolbox.

The fuel tank has been completely re-designed, now carrying the higher percentage of its fuel load low down in the pannier-type sides and vacuum-pumping it up to carburettor level.

All of this has contributed to making the 1986 version of the Ténéré an even more predictable and precise-handling motorcycle than before, whatever the terrain.

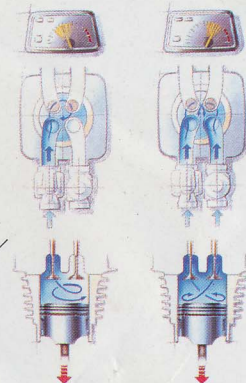
Like any of Yamaha's competition-based production bikes, development on the Ténéré never really stops. What we learn out in the North African wastelands benefits the road and enduro riders of Europe and the world.

And that's why the Ténéré is Number One. Because you *know* there's nothing else like it on — or off — the road today!



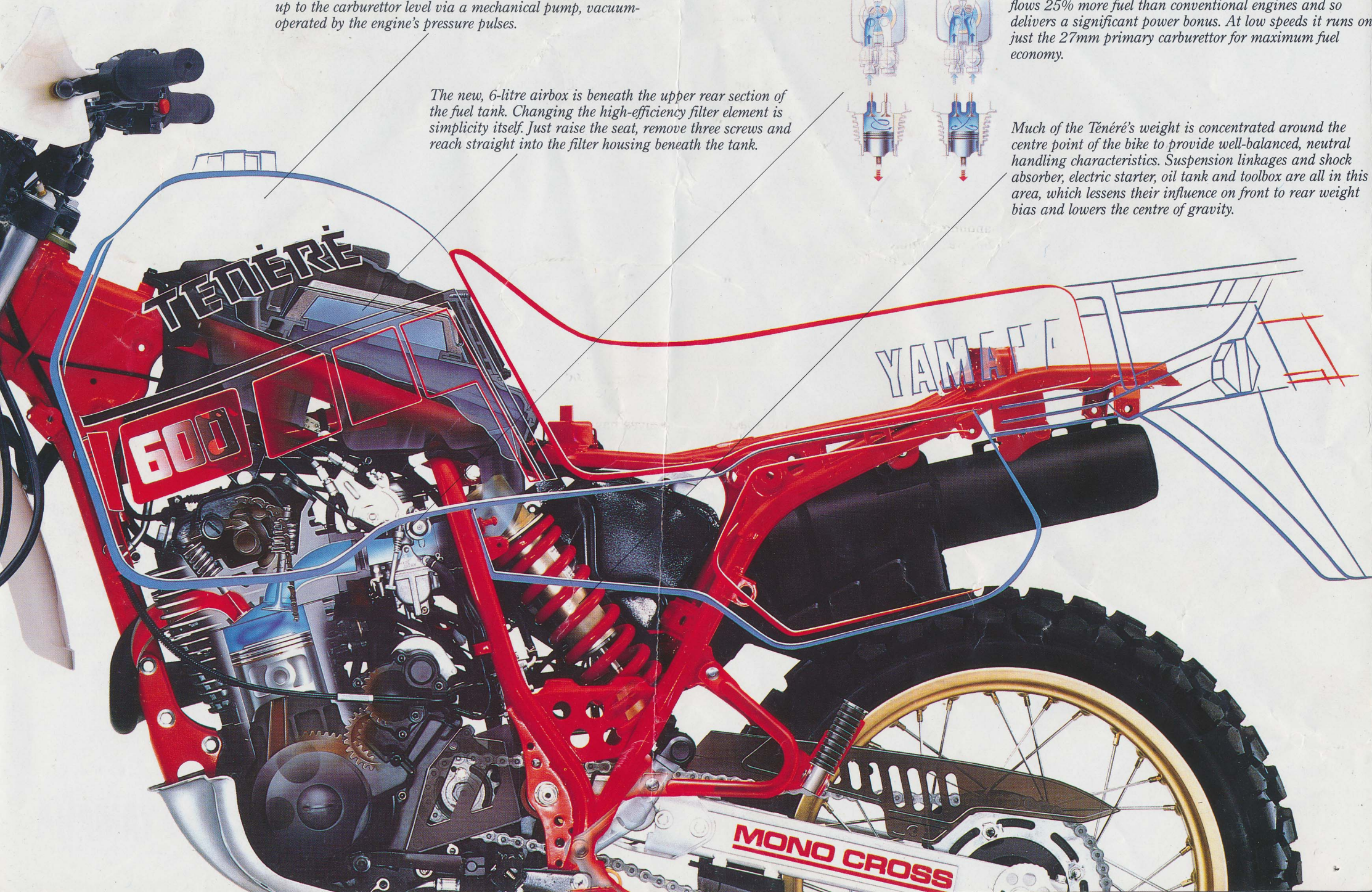
The new-design Ténéré fuel tank carries most of its 23-litre fuel load low down in its pannier-type sides, where the weight has least effect on the machine's handling. Fuel is fed up to the carburettor level via a mechanical pump, vacuum-operated by the engine's pressure pulses.

The new, 6-litre airbox is beneath the upper rear section of the fuel tank. Changing the high-efficiency filter element is simplicity itself. Just raise the seat, remove three screws and reach straight into the filter housing beneath the tank.



The twin-carburettor Yamaha Duo Intake System combines with the four-valve cylinder head to provide the XT600Z with the best of both worlds. At maximum rpm, the system flows 25% more fuel than conventional engines and so delivers a significant power bonus. At low speeds it runs on just the 27mm primary carburettor for maximum fuel economy.

Much of the Ténéré's weight is concentrated around the centre point of the bike to provide well-balanced, neutral handling characteristics. Suspension linkages and shock absorber, electric starter, oil tank and toolbox are all in this area, which lessens their influence on front to rear weight bias and lowers the centre of gravity.

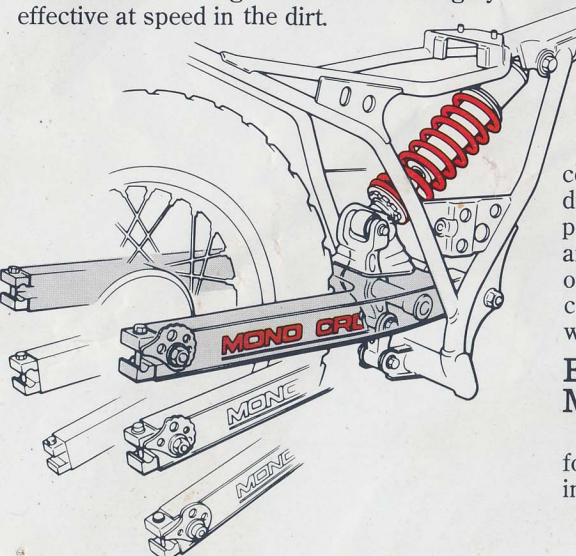


CHASSIS AND SUSPENSION.

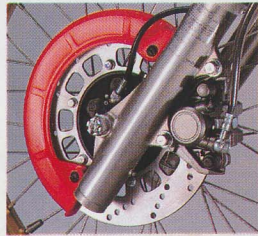
The chassis is a torsionally rigid "diamond frame" construction with a large-diameter single front downtube and triangulated rear section. The engine unit is used as a stress-bearing component of this frame design so that engine and chassis act as one rigid unit to resist the flexing of fast riding over rough terrain.

Soaking up the bumps at the rear is the familiar Monocross suspension system. The rear wheel has 235mm of travel and is carried in a tough, box-section swinging arm. Chain adjusters are *outside* the arm so that the flex-resistant rectangular-section is maintained to its extremities. This keeps the rear wheel in line even when the going is at its roughest.

Movement of the arm is controlled by the single De Carbon-type gas/oil shock absorber, adjustable for both damping rate and spring pre-load. A system of cranked linkages joins shock absorber to swinging arm and increases leverage forces in rising rate proportional to wheel travel. This gives light, comfortable suspension on smooth surfaces, getting progressively more resistant as the bumps get bigger. It's a system first developed for our World Championship-winning motocross racers... as were the Ténéré's long travel front forks that provide 255mm of wheel movement with air-assisted spring control. Their leading-axle position makes the XT600Z directionally stable when cruising on the road and highly effective at speed in the dirt.



CENTRALISING THE WEIGHT.



With this well-proven and efficient base to build on, Yamaha went directly to the factory racing department for the improvements incorporated in the 1986 version of the Ténéré.

The XT600Z is designed to carry a heavy fuel load, so first priority was to concentrate this load as closely as possible around the centre point of the bike, where its weight would have the least effect on the machine's handling. To achieve this, the 23-litre fuel tank was completely re-designed and re-styled. Most of the fuel is now carried low in the pannier sides of the big tank, where it won't give a "top-heavy" feel to the Ténéré as it is cranked into the corners. Fuel is fed up to the carburetors by a mechanical fuel pump, vacuum-operated by the engine's power pulses. No electrical parts to fail in the middle of nowhere. When the engine is running, the pump is operating. It's as simple as that!

Bringing the fuel load down has now allowed the designers to utilise the space beneath the rear of the tank to house the air filter; way up out of harm's way.

Access to the filter now couldn't be easier. Simply raise the front of the seat and reach in under the tank. There's no need to remove it. This location has also permitted the use of

a larger airbox (up from 4 litres to 6 litres) and a filter element increased in size from 320cm³ to 420cm³. Intake noise is reduced and more air is flowed into the new, high-output engine.

Other components re-located to lower and centralise the weight mass include the heavy-duty 12-volt battery, which is now centrally positioned between the rear sub-frame tubes and flanked by the toolbox and the oil tank on the right. Also re-positioned is the oil-cooler. It now sits at the front of the fuel tank where it receives the maximum cooling airflow.

ELECTRIC STARTER MAKES THINGS EASY.

The improvements to the XT600Z engine for 1986 have not been confined simply to increasing the power output.

Now there's a compact electric starter that

will immediately fire up the engine, whether you stall it in traffic or halfway up a sand dune! It is mounted behind the cylinder and above the transmission case, where its added weight least affects handling behaviour.

The starter button is positioned just below the engine kill-switch on the right handlebar and in many European markets a special safety switch makes it impossible to start the engine when the sidestand is down.

Moved inboard from the left handlebar for 1986 is the choke operating lever. Now there's a knob situated just below the neat rectangular instruments at the steering head. This is to prevent breakage in the case of a fall, the instrument panel being protected by the streamlined headlamp cowling.

POWER INCREASE KEEPS THE TÉNÉRÉ AHEAD.

Staying ahead of the competition means having more power on hand, so the Ténéré's output has been beefed-up this year by a number of changes in the cylinder head area.

A new-profile cam extends the valve-opening period and this is complemented by re-designed ports and combustion chamber plus bigger valves. Each of the two inlet valves has been increased from 36mm to 37mm, while exhaust valves increase from 31mm to 32mm.

The secondary carburettor bore goes up from 27mm to 28mm and the net result of all this is a 2hp increase across the whole rev-range.

The primary carb diameter is kept at 27mm to maintain the economical low-speed running of the unique YDIS and, because this carburettor has direct pull throttle operation, engine response to twist-grip command is instant. The secondary carburettor is of the constant-vacuum type and this year uses a rubber-diaphragm throttle control rather than the previous free-floating piston method. The diaphragm is sensitive to engine pressures, expanding or contracting as the pressure changes.

It operates on the throttle slide, automatically raising it or lowering it in accordance with the engine's pressure demands.

Thus, the engine gets exactly the amount of fuel it needs and the result is precise, highly efficient fuel metering at higher engine speeds.



FUNCTION WITH STYLE.

The changes to the XT600Z Ténéré for 1986 have been underlined by re-styling of various body parts. New tank profile and new seat; a new tail cowling and double-bulb "fail-safe" light unit; slightly higher headlamp cowling; new-design fenders, side covers and front disc brake shrouding; plus a bigger crankcase guard to protect the engine and bigger handlebar brush guards to protect the rider.

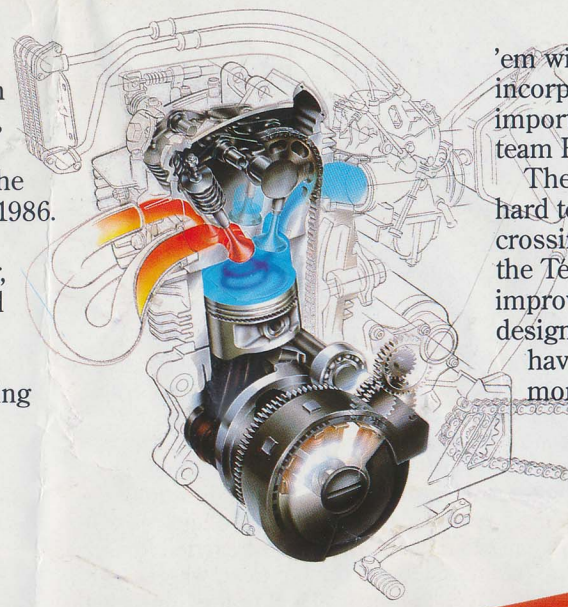
All functional as well as styling improvements and all indicative of Yamaha's serious intentions to hang on to the Ténéré's "Number One" rating for a long time to come!

If you thought that the old Yamaha XT600Z Ténéré was the hottest bike in the dual-purpose enduro bike category, you'd be absolutely right. In fact, about the only thing capable of beating it is the *new* Ténéré introduced by Yamaha for 1986.

Even though our XT600Z was the biggest-selling bike in Europe last year, we just don't believe in hanging around and letting the competition catch up. "Hit 'em while they're down" is our philosophy. And here's what we're hitting

'em with! A dramatically uprated Ténéré incorporating just about all of the important features of our 1985 factory team Paris-Dakar racers.

The basic package is still the same. It's hard to improve on something capable of crossing the Sahara Desert as quickly as the Ténéré does it! Engine power improvements and re-location or re-design of several key cycle components have, however, made the XT600Z even more effective.





XT600Z TÉNÉRÉ SPECIFICATIONS

ENGINE

Type... 4-stroke, SOHC, 4-valve, single
 Displacement..... 595 cc
 Bore and stroke 95.0 × 84.0 mm
 Compression ratio 8.5:1
 Max. power (DIN)..... 46.0 PS
 (33.8 kW) @6,500 rpm
 Max. torque (DIN) 5.2 kg-m
 (51.0 Nm) @5,500 rpm

Lubrication Dry sump
 Carburation..... Y27PV
 Ignition CDI
 Starter system Electric/kick
 Fuel tank capacity 23.0 lit.
 Oil capacity 2.4 lit.
 Transmission..... 5-speed
 Final transmission Chain drive

CHASSIS

Overall length 2,210 mm
 Overall width 890 mm
 Overall height 1,260 mm
 Seat height..... 890 mm
 Wheelbase 1,450 mm
 Min. ground clearance 265 mm
 Dry weight..... 155 kg

Suspension

Front Telescopic forks
 Rear..... Monocross

Brakes

Front Hydraulic disc
 Rear..... Drum

Tyres

Front 3.00-21
 Rear..... 4.60-18

*Specifications and appearance of Yamaha motorcycles shown here may vary according to requirements and conditions and are subject to change without notice.
 For further details, please consult your Yamaha dealer.
 Always wear a helmet and eye protection.*

Mitsui Machinery Sales (U.K.) Ltd.
 Oakcroft Road
 CHESSINGTON/SURREY KT9 1SA
 Tel: 01-3975111
 Tlx: 929929

RICHARD STEVENS M/CS
14, ESTCOURT ST.
DEVIZES, WILTS.
TEL: 5467.
YAMAHA AGENTS.



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