

Husqvarna TE449: evolution of the species

The experience gained over the last year has made the new TE449 an even more competitive bike. The basic profile is unchanged, the 449 is still the bike that inspires love at first sight, with all the innovative technical features that put it amongst the market leaders in the sector. It was already exclusive, now it has become more streamlined and efficient. Aesthetically it is more pleasing, the chassis is now black, the hubs anodised silver, new graphics emphasize the flow of the lines that express functionality, lightweight and style. The ergonomic side panels allow the driver more freedom of movement, the integrated in-mould graphics are guaranteed to last. The days of "adhesive" graphics that come off with the second power wash are gone.

But races are won by the stopwatch, not on the catwalk, and the changes in handling and mechanics make the new TE449 a more reliable bike, tough and competitive enough to win and keep winning!

Stronger frame, lower profile.

The new version uses more 25CrMo4 chrome-moly steel to reinforce the steering head, the seat rail and engine mounts. The rear section – now a single rear fender piece – is stronger and more streamlined and the entire electrical system has been simplified and lightened. The styling and layout have been completely redesigned; it has better balance, with new suspension settings and the rear Kayaba monoshock is shorter by 4 mm, further reducing seat height. The top of the range rear suspension uses Kayaba components (adjustable for rebound and compression) and upside down linkage, combining the advantages of progressive linkage with a sheltered location. The front suspension (48 mm diameter forks) has been improved with progressive dampening. The rear shock is better shielded for additional protection.

These modifications are the result of the collaboration between the Husqvarna R&D team and the official racing team, further streamlining the frame designed to concentrate weight on the bike's centre-of-gravity and minimize chain-torque. The steel tubing perimeter frame was designed for the CTS - Coaxial Traction System – the TE449 reduces to a minimum the influence of the final transmission on dynamic handling and steering. With the driving pinion coaxially aligned with the swingarm pivot, the torque generated by a powerful 450cc engine now has almost no influence on changes in road holding and handling, and above all allows the designer to place the engine as far to the rear as possible, improving the wheelbase, enabling the forward slant of the cylinder head which lowers the centre of gravity and giving straighter fuel lines to the engine.

The safety of the braking system is to a trusted standard: Brembo! The front Braking disc has a diameter of no less than 260 mm - with twin piston floating calipers, while the 240 mm rear disc has a light and compact single piston floating caliper.

More linear power delivery

The single cylinder, four valve, twin cam titanium valve engine is a recent design and needed few modifications, just some minor changes to the power curve. To better access and exploit all the power of the TE449, the designers concentrated on mapping of the Keihin injection, which controls the action of the double flap 46mm throttle body). Fine tuning included balancing of the engine thermodynamics with the light steel Akrapovic exhaust, developed in collaboration with a prestigious Slovenian manufacturer. The efficiency of the cooling circuit was improved with a change to the radiator, introducing a new WP component.

Unchanged are the six gears and clutch with soft and progressive hydraulic action. Weight is saved by eliminating a kick starter, which has proved to be superfluous, given the efficient and reliable electric ignition with high-power battery.