Ferrari





Sporty, agile and versatile: the new GTC4Lusso T

The first Ferrari V8-engined four-seater

World Premier of the GTC4Lusso T at the Paris Motor Show

Paris, 29 September 2016 - Following on from the success of GTC4Lusso, which raised the performance bar for Ferrari's traditional four-seater V12 GTs, the Prancing Horse announces the arrival of the new GTC4Lusso T, the first four-seater to be powered by a V8 engine. Ushering in a whole new Ferrari Grand Touring concept, the car is aimed at drivers seeking a car that is sporty and versatile, as well as perfect for driving on a daily basis.

The new GTC4Lusso T is equipped with an evolution of the 3.9-litre V8 turbo which punches out a maximum of 610 cv at 7,500 rpm, guaranteeing powerful acceleration with maximum torque of 760 Nm available between 3,000 and 5,250 rpm. Despite such impressive performance, the GTC4Lusso T's fuel consumption figures guarantee extended range, ideal for town driving or long trips.

Combining this powertrain with rear-wheel drive has resulted in significant weight-saving. Adding four-wheel steering to the mix gives the car additional agility and quicker responses. The rear-wheel steering system is integrated with the latest evolution of the electronic controls of the SCM-E suspension, ESP 9.0 and third generation Side Slip Control (SSC3).

ENGINE

Like every engine to come out of Maranello, the GTC4Lusso T's V8 turbo has all the classic Ferrari power unit qualities: razor-sharp throttle response, blistering performance, continuous and powerful acceleration at all speeds, an exhilarating soundtrack and compact dimensions. Mounted low down in the chassis, it helps sharpen driving dynamics.



The car's V8 is the latest evolution to emerge from the engine family that was named the 2016 International Engine of the Year. The 3,855 cc power unit is both compact and efficient, developing 610 cv at 7,500 rpm, resulting in a specific power output of 158 cv/l, the highest in its category. It is also responds instantaneously to the throttle delivering increasingly powerful acceleration (760 Nm of maximum torque between 3,000 and 5,250 rpm) while optimising fuel consumption.

This class-leading performance is achieved by the adoption of new pistons and con-rods in high-resistance aluminium alloy to maximise pressure inside the combustion chamber, new more linear high- and low-pressure air ducts in the intake system to minimise losses and a new intercooler to increase air cooling and minimise fluid-dynamic losses.

The instant throttle response typical of Ferrari V8 engines is guaranteed by a flat-plane crankshaft, compact turbines featuring twin-scroll technology and a three-piece cast exhaust manifold and turbo housing, the former with equal-length pipes to optimise pressure waves in the turbine.

The car's excellent performance across the entire rev range, on the other hand, is the result of intensive research into maximising combustion efficiency. The solutions adopted include high-tumble intake manifolds, specifically shaped to improve air entry to the combustion chamber, an ion-sensing system with adaptive ignition and multi-spark functionality which optimises combustion both under high and partial loads across the engine's rev range. Optimised mechanical efficiency is guaranteed by a variable-displacement oil pump that supplies oil at either high pressure or low pressure, reducing the hydraulic power requirements by up to 30 per cent compared to a conventional pump, and a valvetrain with roller finger followers to reduce the power absorbed by 10 per cent at low revs.

One of most innovative features of the GTC4Lusso T's V8 is Variable Boost Management, a control software that adjusts torque delivery to suit the gear selected, delivering increasingly powerful pick-up as revs rise, whilst optimising fuel consumption. And all without impinging on driving pleasure. As the car goes up through the gears (from 3rd to 7th), the amount of torque delivered by the engine increases all the way up to 760 Nm in 7th gear. This has allowed Ferrari to adopt longer gear ratios in the higher gears to the benefit of fuel consumption (the car's range is, in fact 30 per cent more than the V12-engined model).

In line with the finest Ferrari tradition, the GTC4Lusso T has been given its own unique and utterly unmistakable soundtrack. In addition to the flat-plane crankshaft, which synchronises engine firing, and equal-length exhaust headers which equalise the sound, the exhaust line now features a new central section along with a larger-diameter silencer.



VEHICLE DYNAMICS

When Ferrari's engineers decided to adopt a V8 turbo engine and rear-wheel drive for the GTC4Lusso T, their aim was to modify the vehicle dynamics to give a sportier feel that was coherent with the handling characteristics laid down by the V12 version. A combination of the car's lighter overall weight and increased weight bias towards the rear (46:54%) allowed the adoption of a specific set-up for the 4WS and SCM – E control systems. These ad hoc vehicle dynamic control systems ensure the GTC4Lusso T feels more nimble and has reduced roll. The feeling of longitudinal performance is enhanced at low speeds by Variable Boost Management.

In press-on driving, the 4WS (rear-wheel steering) helps provide a sharper response to steering wheel inputs, both entering and exiting corners, thanks to the fact that the rear wheels steer in the same direction as the front ones.

The Magnaride SCM-E damper control system is the same as on the GTC4Lusso and represents the state-of-the-art in control algorithm development. On the GTC4Lusso T, body control is governed by a control model adapted to the new car's weight distribution and suspension characteristics, and which optimises the tyre contact based on the sensitivity to vertical frequencies.

The response time between front and rear axles has been cut by 6.5 per cent while the steering wheel activity is down 2.5 per cent. As with the GTC4Lusso, the rear-wheel steering makes it easier for the car to be driven on the limit by making the latter more predictable and easier to control.

The Side Slip Control 3.0 (SSC3) system dialogues with all the GTC4Lusso T's components and vehicle dynamics controls. It is thus able to adapt the car's behaviour to suit differing dynamic and grip conditions. Through the information it receives from all the body sensors and the grip estimation, the SSC3 delivers a real-time estimate of side slip to all onboard systems, which means the car's behaviour is more precisely tailored to the various dynamic situations it encounters.

The integration of the F1-Trac and E-Diff electronic differential optimises traction and torque delivery to the outside and inside rear wheels. This system also makes the car more driveable on medium grip surfaces.

The five Manettino positions (Ice, Wet, Comfort, Sport, ESC OFF) underscore the potential of the car's architecture and vehicle dynamics controls, particularly the rear-wheel steering and electronic differential (E-Diff). The combined effect of the two systems is that torque is



efficiently split between the two rear wheels, controlling slip when the rear wheels are on mixed grip surfaces. The rear-wheel steering makes turning in, cornering and exiting corners more effortless, by making yaw angle more predictable with an instant reduction in the amount of steering wheel correction needed and its frequency.

DESIGN

Designed by Ferrari's Styling Centre, the GTC4Lusso T maintains the same innovative take on the shooting brake coupé as the V12 version, reinterpreting the concept with an extremely streamlined, tapered shape that gives it an almost fastback-like silhouette. The cabin is an effortless melding of sophisticated elegance – seen in the artisan quality of the prestigious hides - and the high-tech, sporty aspect of the metal or carbon-fibre components mainly found in the human-machine interfaces.

The GTC4Lusso T features the unique Dual Cockpit architecture, designed to enhance the shared driving experience for both driver and passenger. It also incorporates the latest iteration of the infotainment system complete with an impressive 10.25" HD capacitive touchscreen.

Available to order are specific tailpipes and 20" forged wheels developed especially for the V8 model with a very dynamic design.



Images of the GTC4Lusso T can be downloaded from the Ferrari media site - $\underline{www.media.ferrari.com}$

GTC4Lusso T Technical Specifications

Engine

Type V8 - 90° Turbo

Overall displacement 3,855 cc

Bore and stroke 86.5 mm x 82 mm

Maximum power output** 449 kW (610 CV) at 7,500 rpm Maximum torque 760 Nm at 3,000 -5,250 rpm

Max. revs 7,500 rpm Compression ratio 9.4:1

Weight and dimensions

4,922 mm Length Width 1,980 mm Height 1,383 mm Wheelbase 2,990 mm Front track 1,674 mm Rear track 1,668 mm Kerb weight* 1,865 kg Dry weight* 1,740 kg

Weight distribution 46% front - 54% rear

Boot capacity 450 l Fuel tank capacity 91 l

Tyres

Front 245/35 ZR20"; 8.5" J x 20" Rear 295/35 ZR20"; 10.5" J x 20"

Brakes

Front 398 mm x 38 mm



Rear 360 mm x 32 mm

Transmission and gearbox 4WS/ 7-speed F1 DCT/E-Diff

Electronic controls SSC3/CST with F1 TRAC system, ESP 9.0

Premium with ABS Evo/ SCM-E

Performance

 Maximum speed
 >320 km/h

 0-100 km/h
 3.5 sec

 0-200 km/h
 10.8 sec

 100-0 km/h
 33 m

 200-0 km/h
 137 m

 Dry weight/power
 2.85 kg/cv

Fuel consumption CO₂ emissions

Fuel consumption*** 11.6 1/100 km Emissions*** 265 gCO_2/km