

## THE McLAREN 675LT: POWER. A BEAUTIFUL THING

- Light weight, optimised aerodynamics, increased power, track-focused dynamics and driver engagement – all characteristics of a McLaren ‘Longtail’
- 0-100 km/h (62 mph) in 2.9 seconds; 0-200 km/h (124 mph) in 7.9 seconds; top speed of 330km/h (205 mph)
- 100kg weight saving makes the 675LT the lightest in its class, and gives a power-to-weight ratio of 549PS per tonne
- Stripped out, driver focused interior hints at the performance of the most track-focused, yet road legal, McLaren series production model to date.
- Limited production to 500 coupés, which are all sold out

The McLaren 675LT, which debuted in production form at the 2015 Geneva Motor Show, is the lightest, most powerful, fastest and most track-focused, yet road legal, model in the McLaren Super Series, and resurrects one of the most revered names in modern-day GT racing – the ‘Longtail’. It is also the most exclusive in the range, with confirmation that 500 coupés will be produced, all of which are now sold.

The 675LT, the first McLaren in nearly two decades to wear the LT – or ‘Longtail’ – name, stays true to the spirit of its iconic predecessor with aerodynamically optimised, dramatically enhanced styling that results in 40 percent more downforce than the 650S which it sits alongside in the McLaren Super Series.

*‘The Longtail is a famous name in the history of McLaren, first used on the fastest version of the iconic McLaren F1,’* explains Mike Flewitt, McLaren Automotive Chief Executive Officer. *‘The McLaren F1 GTR ‘Longtail’ was the final highly successful iteration of the F1, and it is an appropriate name for the most exhilarating and driver-focused version of the Super Series. The 675LT is the purest distillation of what McLaren stands for – pure driving pleasure.’*

The main focus for the 675LT is clear: to deliver maximum performance, engagement and excitement. To achieve this, weight has been reduced by 100kg through the increased usage of carbon fibre – the signature material of McLaren – and by lighter components throughout, including newly developed suspension geometry derived from the McLaren P1™, resulting in an increased track of 20mm. Power of the newly-developed M838TL 3.8-litre twin-turbocharged V8 engine is 675PS (666bhp) at

7,100rpm, with a torque figure of 700Nm (516 lb ft) at 5,500-6,500rpm.

These extreme weight saving measures see the 675LT with a dry weight of just 1,230kg (2,712 lb), meaning a power-to-weight ratio of 549PS per tonne. The sprint from 0-100 km/h (0-62mph) takes 2.9 seconds, with controlled torque delivery ensuring optimised traction off the line. Acceleration continues at relentless pace with the 200 km/h (124mph) barrier broken in 7.9 seconds, on to a top speed of 330 km/h (205 mph). Despite these remarkable performance figures, the 675LT returns 24.2 mpg (11.7 l/100 km) on the EU combined cycle, and CO<sub>2</sub> emissions remain the same as the other Super Series models, at 275g/km.

New carbon fibre bodywork minimises weight and optimises aerodynamic performance, with the addition of a newly designed front splitter, Formula 1™-style nose end-plates and larger 'Longtail' Airbrake. The rear deck is also new. These bodywork changes contribute to a significant increase in downforce levels, up 40 percent over the already extremely aerodynamically-efficient 650S.

The 675LT is fitted with adjustable settings for both Handling and Powertrain through the Active Dynamics Panel rotary switches. While a system shared with other models in the McLaren range, the Normal, Sport and Track settings are uniquely calibrated to the 675LT, and are designed to provide the most engaging and track-focused experience.

The body changes, all driven by aerodynamic needs, increase the design drama. Front ride height is reduced while the track is wider. Handling is optimised through a stiffer and lighter suspension setup, which includes uprights and wishbones derived from those fitted to the McLaren P1™. The adjustable suspension settings have been recalibrated, boosting driving engagement, road holding and agility. Standard-fit Ultra Lightweight 10-spoke forged alloy wheels are the lightest design ever offered by McLaren, saving a combined 800g over the lightest wheel design previously offered.

Though noticeably faster, the 675LT also retains much of the 650S' astonishing usability and practicality. While designed to be even more at home on the track, it is still a highly usable road car with compromise to comfort levels kept to a minimum. The cabin is upholstered in lightweight Alcantara®, and features a four-speaker Meridian hi-fi, DAB digital radio (Sirius satellite radio in North America) and a satellite navigation

system as standard. In the pursuit of minimal weight, and to suit its purposeful intent, air conditioning has been removed, but can be specified as a no cost option.

The driver-focused and minimalist environment is designed to be ergonomically optimised with minimal distractions for the driver. The uncluttered driver zone is void of steering wheel-mounted switches, with clear and concise displays either side of the larger rev counter. Extended carbon fibre gearshift paddles are mounted on a rocker behind the steering wheel. Inspired by those fitted to the McLaren P1™, these are produced from carbon fibre for the first time on the Super Series.

A pair of lightweight carbon fibre-shelled bucket seats, upholstered in Alcantara® and embossed leather are modelled on those in the McLaren P1™. These reduce weight by 15kg and improve the connection between car and driver. Carpet and sound deadening materials are limited within the cabin, further reducing weight.

*‘The 675LT is the closest thing there is to a McLaren P1™,’* explains Mike Flewitt. *‘It is always so engaging and dramatic, and alongside the McLaren P1™ it’s the most extreme expression yet of McLaren road car engineering.’*

*‘Though brilliant on the track – and likely to be extensively used on track days – the extra engagement and performance is immediately obvious when driving on the road, even at low speeds.’*

The 675LT is offered as a coupe only, and limited to only 500 examples worldwide. Priced at £259,500, all have now been sold, with first deliveries scheduled to begin in July.

## McLAREN 675LT: THE DETAILS

As with its namesake which debuted in the 1997 GT season, the 675LT is the most track-focused model in the McLaren Super Series, with a power to weight ratio that eclipses established rivals. Embodying the ethos of the McLaren F1 GTR 'Longtail' it focuses on five key characteristics synonymous with the LT badge: lightweight, optimised aerodynamics, increased power, track-focused dynamics and driver engagement.

### LIGHTWEIGHT

- A third of parts changed compared to the 650S which it sits alongside in the McLaren Super Series
- Significantly enhanced M838TL engine in the 675LT features more than 50 percent new components
- Extensive use of light but strong carbon fibre body panels
- Ultra Lightweight wheels are the lightest ever offered by McLaren

Weight reduction has been a key focus throughout the development programme for the 675LT and, in a subtle nod to its bigger brother, the result is a saving of 100kg over the other models in the Super Series – in line with the savings made by the 1997 McLaren F1 GTR 'Longtail' over its hugely successful predecessors, despite the revised bodywork. The weight savings on the 675LT have been achieved through the extensive use of carbon fibre for the body panels, along with lightweight engine, chassis and body structure parts.

In addition to the use of carbon fibre, weight saving has been achieved through the application of lightweight engine, chassis and body structure parts. Key weight saving features include:

- Body panels – 35 percent
- Chassis – 30 percent
- Powertrain – 10 percent
- Interior – 20 percent
- Electrical – 5 percent

## DESIGN

Like all McLaren models, the 675LT is an engineering-led design. Everything is designed for a reason, form always following function. The design goal with the 675LT was to boost aerodynamic performance – most importantly, downforce and the extra cooling requirements of the more powerful engine.

*‘Of course we wanted to deliver a stunningly beautiful car,’ says Dan Parry-Williams, Head of Vehicle Design and Engineering. ‘But the beauty is the result of the very demanding technical targets we set. You could call the 675LT technical sculpture.’*

The signature material of McLaren is carbon fibre, having introduced the material to Formula 1 with the MP4/1 of 1981, and then launching the McLaren F1 as the first all carbon fibre road car in 1992. The 675LT has a higher level of carbon than any other car in this sector. As with the McLaren P1™, the carbon fibre panels have optimised lamination to maximise strength and reduce weight.

The new 675LT also uses carbon fibre extensively for body panels, which are lighter than aluminium or composites and much stronger. Designed for lightweight and aerodynamic optimisation, the 675LT features the following new panels, all produced in carbon fibre saving a combined 35kg over an aluminium or composite equivalent:

- Front bumper including larger front splitter and Formula 1™-style end-plates
- Front under body
- Side skirts
- Side air intakes
- Rear bodyside lower panel
- Rear fenders
- Rear deck
- Rear bumper
- Rear diffuser
- ‘Longtail’ Airbrake

As with the 650S which sits alongside it in the Super Series, the 675LT boasts exceptional forward visibility, with a very low cowl and the highest points of the front wings are directly above the centre point of the wheels. This simple design feature ensures optimal positioning of the car on track. While using the same basic design for

the glasshouse as the other Super Series models, the windscreen is 1mm thinner, saving 3kg, while the rear bulkhead glass is 0.5mm thinner, saving a further 500g. The weight saving measures also include a louvred polycarbonate engine cover. These revisions to the glazing save a combined 4.7kg.

Many of the new body panels are finished in lacquered carbon fibre as standard – including the bigger front splitter and side skirts. Other panels can be ordered in carbon finish as an option, including the rear bumper, the front end-plates, side mirror caps and side intakes. The carbon fibre is satin finished, rather than gloss, saving a further 50g, while also allowing a greater level of the weave to be visible.

### OPTIMISED AERODYNAMICS

- Aggressive carbon fibre front splitter, Formula 1™-style front end-plates and a completely redesigned rear optimise aerodynamics to increase downforce by 40 percent
- Widened track by 20mm improves grip and agility, while an increased rake angle increases the effectiveness of the rear diffuser
- ‘Longtail’ Airbrake is 50 percent larger than other Super Series models, generating more downforce, but weighs less

The aerodynamic design of the 675LT is shaped to ensure optimum levels of downforce and cooling, with the airflow being worked as efficiently and effectively as possible across, beneath and through the bodywork. The distinctive and aggressive ‘shark front’ is designed to more purposely channel air on to the bonnet above and in to the intakes below. The side skirts elegantly follow the line of the larger splitter; all guiding air into the lower side intake to support cooling.

New carbon fibre body panels were designed to deliver greater strength, lighter weight and more dramatic style. Below the newly designed front bumper sits a prominent carbon fibre splitter, 80 percent larger than the other Super Series models, which works the air harder, complementing new Formula 1™-style front wing end plates to increase downforce levels over the front bodywork. These design features aid turn-in and steering sharpness. Turbulent air from the front wheel arches is ‘cleaned’ as it flows towards the rear bodywork by sculpted carbon fibre side skirts running the full length of the lower bodywork. A second, lower air intake is newly incorporated ahead of the

leading edge of the rear wheel arch, below a more pronounced side intake behind the door, both of which feed clean cool air into the side-mounted radiators.

Producing 675PS (666bhp), the highly efficient 3.8-litre twin turbocharged V8 engine is cooled via larger air intakes than previously seen on Super Series models. However, in order to ensure there was no compromise with weight, the size of the radiators has not been increased. Instead, the angle has been increased, from 15 to 19 degrees, offering a more efficient solution.

Front and rear track are widened over other Super Series models by 20mm, improving grip levels and agility, while the front ride height has been lowered by 20mm over the 650S, increasing the rake angle. By sitting lower with an increased rake, the speed of the airflow beneath the 675LT is increased, which expels the air at the rear of the car more efficiently. This increases the effectiveness of the rear diffuser, pressing the car into the ground. Additionally, with air moving more quickly underneath the car and exiting more quickly at the rear, the centre of pressure is moved forwards, increasing front-end downforce.

All body panels from the B-pillars backwards are unique to the 675LT, with new rear fenders, including lower bodysides, the entire rear deck, rear bumper, larger rear diffuser and the 'Longtail' Airbrake. Each redesigned panel has resulted in reduced weight and aerodynamic optimisation. The rear of the car, like the front, has a more aggressive and purposeful look and is now working harder. The new carbon fibre rear panels are lighter than a composite or aluminium equivalent, and offer higher levels of structural rigidity – important when they have to cope with the substantially increased levels of downforce.

The rear deck and sections flanking the exhaust pipes remain exposed; designed to evacuate hot air from the engine bay as efficiently as possible. Open-mesh areas around the distinctive taillights, the rear deck and in the lower bumper expel hot air as efficiently as possible. Design Director Frank Stephenson explains: *'The design elements of the 675LT are so extreme, including the race-car like venting at the rear. However, it is important to remember that everything is there for a reason, and that design is to optimise cooling and expel the hot air from the engine and those extreme exhausts.'*

A lightweight polycarbonate rear screen, which saves 1.7kg over a glass equivalent, features further louvres, while a louvred carbon fibre rear bumper reduces air pressure over the rear wheels. The rear design is completed with a dramatic integrated carbon fibre diffuser.

### ‘LONGTAIL’ AIRBRAKE

As with the other models in the McLaren Super Series, the 675LT is fitted with an active rear Airbrake which operates to increase downforce and optimise braking performance. As with its McLaren F1 namesake, the ‘Longtail’ Airbrake is larger than on previous models – 50 percent larger than on other Super Series models. The reprofiled design flows into the lines of the new carbon fibre rear wings. However, due to its carbon fibre construction, is actually lighter.

In ‘Sport’ and ‘Track’ modes, the ‘Longtail’ Airbrake operates with a greater level of functionality providing increased levels of stability, deploying whenever the car senses extra downforce is required, such as during deceleration or when cresting a hill at speed, rather than simply under braking or when manually operated in ‘Aero’ mode. In a straight line, under hard acceleration, the ‘Longtail’ Airbrake automatically lowers, to minimise drag, similar to the DRS function in Formula 1™.

### CHASSIS CONSTRUCTION

Despite the exclusive nature of the brand, and the relatively small production volumes, McLaren builds more all-carbon fibre chassis road cars than any other manufacturer. The heart of the 675LT is the Formula 1™-inspired lightweight carbon fibre MonoCell. This incredibly strong tub weighs just 75kg, yet is 25 percent stiffer than a comparable aluminium chassis, and has an even greater margin of superiority over steel. It is stronger and safer in a crash – and needs no extra bracing or reinforcement such as side intrusion beams. The carbon fibre has enough intrinsic strength without ‘bolt on’ safety beams. It is also more durable than metal, and its greater dimensional accuracy improves build quality.

There are also advantages in ease of repair. Front and rear aluminium extrusions and castings are designed to absorb impacts and are easily fixed. Cars with full aluminium or steel chassis use their structures to absorb and crumple on impact, causing more damage and expense to the entire structure. In order to allow the fitment of the

McLaren P1™-derived suspension components and lightweight bumper beam, the front and rear subframes on the 675LT have been modified.

## INCREASED POWER

- Significantly enhanced M838TL engine in the 675LT features more than 50 percent new components
- Power of 675PS (666bhp) at 7,100rpm and maximum torque of 700Nm (516lb ft) at 5,500-6,500rpm
- Lightweight materials and enhancements within the powertrain save 6kg, while a bespoke crossover titanium exhaust saves a further 1.1kg
- New turbochargers maximise airflow and aid improved throttle response

More than 50 percent of parts are unique to the 3.8-litre twin turbo V8 engine in the 675LT, delivering increased levels of power, torque and driveability. Upgrades include new, more efficient turbos, detail design changes to the cylinder heads and exhaust manifolds, new camshaft and lightweight connecting rods, and a faster-flowing fuel pump and delivery system. These changes are so significant, that the engine unit receives a new, unique code – M838TL. The low weight, low inertia power unit produces, as the name suggests, a power output of 675PS and a power-to-weight ratio of 549PS per tonne.

## POWERTRAIN

The engine in the 675LT has been modified to further improve responsiveness and the linearity of the power delivery. The throttle response is enhanced by the fitment of new powertrain components including lighter connecting rods and camshafts. Weight has also been saved by using smaller and more efficient charge coolers which reduce weight by a further 6kg.

As with the award-winning engine found in the 650S, the M838TL is one of the lightest and most efficient high performance engines in production. Formula 1™-derived technology and know-how include dry sump lubrication, allowing for higher cornering speeds without oil surge, and a flat-plane crankshaft, which enables the engine to be sited extremely low in the chassis, lowering the centre of gravity and improving handling responsiveness.

The twin turbochargers are unique to the 675LT and, although the same size those on the other models in the Super Series, they are more efficient, with a machined-from-solid compressor wheel – rather than cast – maximising airflow into the combustion chambers. The new turbochargers deliver less heat into the charged air, before it reaches the charge coolers and the combustion chambers, which in turn improves fuel and power efficiency.

In addition, the turbochargers now have electronic rather than pneumatic recirculation wastegates. These valves relieve turbo pressure when lifting off the throttle. The electronic system gives a more immediate sense of retardation, improving throttle response. More air into the combustion chambers helps performance, and fuel flow is increased due to a new fuel pump. A new exhaust manifold channels air out of the combustion chambers faster, improving power and throttle response.

Despite the higher power and torque produced, the 675LT returns 24.2mpg on the EU combined cycle, while emissions are the same as the other models in the Super Series, at 275g/km.

On display beneath a lightweight polycarbonate engine cover, the appearance of the 675LT engine is enhanced with a satin-finished carbon fibre plenum and engine bay panels. Unique machined alloy oil and coolant filler caps are also fitted as standard.

The 675LT becomes the latest McLaren road car model to be factory-filled with Mobil 1 New Life™ 0W-40. The high technology engine lubricant has an optimum combination of synthetic base oils designed to meet the high performance engine demands. The product's advanced formula contains additives specially developed to better protect the engine by preventing build-up on critical engine parts, allowing McLaren engines to run like new after thousands of miles, even in the harshest driving conditions.

#### REVISED EXHAUST SYSTEM

The exhaust system is a bespoke design to the 675LT, and has been produced to improve airflow and optimise engine sound. The system includes a new crossover muffler, which allows for an increased length, optimising gas flow volume for increased power and the clarity of the exhaust note. Two circular exhaust pipes, forged from titanium, exit centrally through exposed bodywork below the rear wing. Despite a more



complex design, the bespoke crossover system is designed to optimise performance and reduce weight, saving 1.1kg.

*‘Improved driving enjoyment was a priority – not just when driving at 100 percent, but throughout the car’s entire performance envelope, from town to track,’* explains Mark Vinnels, Executive Director – Product Development. *‘An immediate and linear connection between throttle pedal to torque delivery was essential.’*

## TRANSMISSION

The 675LT uses the familiar seven-speed SSG transmission found in the other Super Series models, retaining the Normal, Sport or Track modes. These settings have been recalibrated to produce more eager performance, with optimised throttle response and gearshifts up to twice as fast as previously offered. The newly developed *Ignition Cut* technology is a technique adopted from Formula 1™ which sees a momentary cut of the fuel spark on gearshift. This delivers the fastest change possible, and is accompanied by a dramatic aural ‘crack’ on both upshift and downshift.

For optimal performance, the 675LT uses the innovative *Inertia Push* technology – pioneered on the 650S. Available when in the Track setting – above 5,000rpm and from 60 percent throttle input – *Inertia Push* harnesses the built up kinetic energy to deliver an impulse of torque as the next gear is engaged, ensuring no drop in performance as the driver moves up through the gears.

As with the 650S, the dual-clutch transmission can operate as a full automatic, a semi-automatic or a full manual. Manual gearshifts are made using steering wheel-mounted carbon fibre rocker paddles, derived from those on the McLaren P1™’.

The drivetrain of the 675LT has been developed with a key focus on the interaction between the throttle, engine and the gearbox. Through a bespoke calibration, a smooth and consistent pull-away has been achieved.

## ENHANCED ESC CALIBRATION

Debuting on the 675LT is an all-new Electronic Stability Control (ESC) calibration, including ESC Dynamic mode, which gives the driver an even greater level of control over the throttle and brake inputs. A dedicated ESC button means this safety feature



can be turned off entirely. It is available in Sport and Track powertrain modes. In addition, the system also features a level of activation which reduces electronic support and permits greater slip angles. This is designed for safe but fast and entertaining track driving. Track mode allows for greater slip angles than Sport. A single press of the ESC button allows for this reduced level of electronic control.

Brake Steer is another technology which boosts the capabilities and agility of the McLaren 675LT. Initially developed by McLaren for Formula 1™ and introduced during the 1997 season, it was quickly banned as it was seen to offer a competitive advantage. The system aids cornering by bringing the vehicle's nose into the apex by applying braking force to the inside rear wheel, enabling the driver to brake later and get on the power earlier. It offers the same benefits as a 'torque vectoring' differential, but by using the same hardware as the ESC system, it can reduce understeer, and help optimise lap times and driving precision.

## TRACK-FOCUSED DYNAMICS

- Stiffer springs front and rear provide sharper response
- Ultra-Lightweight wheels and newly developed Pirelli P Zero™ Trofeo R tyres are the lightest wheel / tyre set ever offered by McLaren
- Club Sport Pack and Club Sport Professional Packs offer even greater levels of track focus

Like all models in the Super Series, the 675LT has Normal, Sport and Track suspension settings. The sportiness of all three settings has been recalibrated to deliver sharper responses and a more connected ride, as Chief Test Driver Chris Goodwin explains: *'We've improved roll stiffness, damping and pitching and it is a slightly edgier, more raw and slightly more harsh car – and that's intended. But the beauty of the ProActive Chassis Control system, when coupled with our groundbreaking carbon fibre MonoCell chassis, is that ride comfort and refinement have not been unduly sacrificed. It is perfectly suited for a drive from London to Spa-Francorchamps and back for a trackday.'*

## SUSPENSION

New springs front and rear are lighter than previously used, and are the stiffest in the Super Series, as would be expected of a track-focused model. An increase of 27



percent at the front and 63 percent at the rear improves body control and sharper responses, allowing for the 40 percent increase in downforce generated by the revised bodywork and active aerodynamics. This is coupled with a faster steering rack to give a more extreme driver-focused experience. *'This is a more engaging car, and more alive,'* adds Haydn Baker, Head of Vehicle Line. *'The driver feels really connected.'*

The suspension system also includes uprights and wishbones derived from the McLaren P1™ which save further weight, and increase the track by 20mm over the 650S. This newly-developed suspension geometry is derived from Formula 1™, explains Carlo della Casa, Engineering Director. *'We wanted to replicate some of the dynamic drama of the McLaren P1™. The uprights, hubs, castor, king pin angles and toe-in/toe-out all contribute to a more extreme driver-focused geometry. In many ways this feels like a track car, and has been engineered with a track mindset.'*

#### PROACTIVE CHASSIS CONTROL (PCC)

The 675LT is fitted with the latest generation ProActive Chassis Control, with a unique calibration to ensure the most engaging and track-tailored set up. The pioneering system, which includes active damping, was first introduced on the first of the modern McLaren models, the 12C, and has been developed and engineered further since then with each new model to allow for greater levels of refinement or focus depending on mode selected.

Dampers are connected hydraulically and linked to a gas-filled accumulator, providing adaptive responses depending on road conditions and driver preference. It allows for precise roll control in corners while decoupling the suspension in a straight line for excellent wheel articulation and compliance. The system does away with conventional mechanical anti-roll bars, and reduces weight as a result. An anti-roll bar is a staple of other high performance sports and supercars, and a reason why traditionally the ride quality is compromised, particularly at low speed.

#### CHASSIS

As with a Formula 1™ car, wishbone suspension is used on all four corners of the 675LT. It is attached to the revolutionary carbon fibre MonoCell – the perfect platform to ensure predictable suspension behaviour, owing to its rigidity and manufacturing precision.

The carbon fibre MonoCell chassis is at the heart of each of the Super Series models, and is the Formula 1™-inspired tub that is 25 per cent stiffer than a comparable aluminium chassis, and has an even greater margin of superiority over steel. It is also stronger and safer in a crash, acting as a safety survival cell, as it does in Formula 1™. It weighs just 75kg – much lighter than a metal chassis, as used by the majority of rivals. It is also more durable than a metal chassis, and its greater dimensional accuracy improves build quality and the predictability of its performance.

## WHEELS AND TYRES

Two unique designs of forged alloy wheels are offered on the 675LT, shod exclusively with tyres developed specifically for the most powerful model in the Super Series with technical partner Pirelli. A newly designed Ultra Lightweight 10-spoke forged alloy wheel is fitted as standard, finished in silver or optionally available in stealth. It is the lightest design of wheel ever offered by McLaren, offering weight saving even over the design fitted to the McLaren P1™. The second style is a five-spoke design again offered in silver, with stealth and gloss/diamond-machined finishes also available. In both cases, the wheels are 19inch x 8.5inch at the front and 20inch x 11inch at the rear.

Tyres are unique to the 675LT and have been developed by McLaren with technical partner Pirelli – to complement the specific handling requirements. High performance Pirelli P Zero™ Trofeo R tyres are specified as standard which have a stiffer internal structure – providing more response – and six percent more grip than the Pirelli's highly capable P Zero™ Corsa tyre, widely used on ultra-high performance cars. For those planning less track driving, or in colder or wetter weather, Pirelli P Zero™ tyres are offered as a no-cost option.

## CLUB SPORT PACK

True to the 'Longtail' badge, the 675LT is the most track-focused model in the Super Series and, as such, is available with two optional upgrade packs tailored for track usage.

The Club Sport Pack includes a titanium roll hoop with four point harnesses and a fire extinguisher. The use of titanium halves the weight of a conventional steel hoop, and this is the first time that the material has been used for a roll hoop in the automotive industry.



## CLUB SPORT PROFESSIONAL PACK

The Club Sport Professional Pack includes the items in the Club Sport Pack, and adds further track-dedicated and styling elements to give the 675LT an even more aggressive and purposeful look.

The pack includes extensive carbon fibre detailing and stealth finishing throughout the bodywork. Carbon fibre is also used for the front wing end plates, lower side air intake and the centre of the rear bumper, along with the side intakes, wheelarches and wing mirrors. Exclusive to this pack, the 'Longtail' Airbrake is also finished in visual carbon fibre further emphasising the material at the heart of the 675LT.

Echoing the original colour of Bruce McLaren's early racers, McLaren Orange detailing carries through from the brake callipers to the interior with orange embossed leather and contrasting stitching on the fixed-back carbon-shelled racing seats and throughout the Alcantara®-upholstered cabin. This is matched by a luxury leather weekend holdall in stealth black leather.

The Club Sport Professional Pack is offered with a choice of four paint colours; Titanium Silver, Storm Grey, Onyx Black and Chicane Grey. All are matched with stealth-finished Ultra-Lightweight 10 spoke forged alloy wheels with Pirelli P Zero™ Trofeo R tyres.

## DRIVER ENGAGEMENT

- Newly developed advanced engine control strategy boosts responsiveness
- Driver-focused cabin upholstered in weight-saving Alcantara®, with carpet and sound deadening materials limited to reduce weight further
- 'By McLaren' themes premiere on the 675LT with five carefully developed bespoke colour specifications

With a saving of 100kg over the other models in the Super Series, weighing 1,230 (2,712lb) the 675LT is the lightest model produced by McLaren to date. This lighter weight benefits agility, handling, acceleration and response, while the aerodynamically efficient styling boosts downforce levels at the front and rear. This optimisation improves steering sharpness, turn-in to a corner, and high-speed balance.

With 675PS (666bhp) and 700Nm (516lb ft) of torque available, throttle response and



driving excitement are maximised, The increased power and torque help throttle response and driving excitement, while the remapping of the control strategy for the engine and transmission also act to sharpen responses and increase the sense of connection between the throttle pedal and the driven wheels, with no adverse effect on CO<sub>2</sub> emissions.

With the highest power-to-weight figure in its class, the 675LT offers extreme performance both in acceleration and lap times around a racing circuit. But this car is as much about feel as measurement. The 675LT features a host of examples where detailed changes have been with a focus on further enhancing driving enjoyment. These are evident through the powertrain, chassis architecture and within the cabin.

## POWERTRAIN

*'An engaging driving experience was an absolute priority,'* says Dan Parry-Williams, Head of Vehicle Design and Engineering. *'We focused from the outset on the driving experience and therefore how we wanted to fine tune the sensory cues that a driver responds to, and relies upon. These include sound, throttle response, gearshift, braking and steering. The objective was to make the driver feel completely connected to the car and make the total experience as exhilarating as possible.'*

Interaction is enhanced by the *Ignition Cut* technology during gearshifts. By cutting ignition, rather than fuel supply, gearshifts are faster and are accompanied by a distinct 'crack' as the unburnt fuel is ignited by the new spark.

A newly developed advanced engine control strategy boosts responsiveness, further harmonising the integration between throttle, engine and gearshift, providing superbly intuitive driving behaviour. A key target, as Davide Bizzari, Powertrain Control Manager highlights, was *'to remove any hint of dead travel'* from the throttle pedal, so every input, no matter how minor, has an effect. *'Having a great link from the throttle pedal, to torque delivery, is key for great driveability,'* Bizzari explains.

Driver engagement, and the connection between the driver, the engine and the road, is further heightened by the use of lighter internal components in the engine which remove mass and inertia in the drivetrain.

## DYNAMICS

With a clear focus on track activity, but still fully road legal, the 675LT provides the sharpest and most responsive steering of any model in the Super Series. A new steering rack is the fastest fitted to a McLaren model to date, and is coupled to bespoke suspension tuning, including the use of the uprights and wishbones from the McLaren P1™. New specially developed Pirelli P Zero™ Trofeo R tyres offer a six percent increase in grip over the extremely capable P Zero™ Corsa tyre, boosted by a stiffer structure.

Underlining the performance intent of the 675LT, carbon ceramic brakes are fitted as standard, 394mm at the front and 380mm at the rear. Brake pedal modulation has been enhanced, taking learnings from the highly efficient systems on the McLaren P1™ and 650S, to provide a feel which inspires confidence. The braking performance, working in conjunction with the active ‘Longtail’ Airbrake and the enhanced levels of downforce, can bring the 675LT to a standstill from 100 km/h (62 mph) in 30.2 metres, or just 3.0 seconds. Tuned, stiffer engine mounts further improve dynamics through the steering and throttle.

*‘The whole driving experience has been enhanced to a new level,’ says Dan Parry-Williams. ‘You are instantly aware, from the moment you get behind the wheel, of the extra performance and engagement.’*

Chris Goodwin, Chief Test Driver adds: *‘With the 675LT, we have taken the Super Series to another level – because we can. It feels poised on the road, but totally honed for the track. You just want to keep driving, and keep pressing on. Through reducing the weight, and turning up the sensory feelings through every touchpoint, the excitement factor is turned up to 11. The throttle response, brake pedal feel and turn-in are just more alive.’*

## INTERIOR

The cabin of the 675LT has been designed to offer a cocooning, well-packaged and comfortable environment. Fully focused on the driver, it is clear from clutter and distraction but, unlike many track-dedicated roadcars, the 675LT retains a high level of standard equipment, albeit with a focus on saving weight. Carpet and sound deadening materials are limited within the cabin to reduce weight where possible.



Lightweight Alcantara® trim with contrast stitching is standard throughout the cabin, which saves a combined 3.5kg versus leather, although a full Nappa leather interior is available at no extra cost.

A pair of lightweight carbon fibre racing seats, first seen on the McLaren P1™, save a combined 15kg and provide optimised connection for the driver to the characteristics of the car due, in part, to deeper side bolsters. The new titanium exhaust, including a new exhaust manifold, provides a more inspirational engine note into the cabin.

*'We wanted a more animate driving experience, to convey some sound through the structure of the car,' says Haydn Baker, Head of Vehicle Line. 'These stiffer mounts offer improvements on two fronts. Not only do they emphasise the connection between car and driver, but they also act to improve handling and agility minimising any "pendulum effect" when changing direction.'*

Heating and ventilation (HVAC) is now controlled via the centrally-mounted touchscreen IRIS screen, rather than through door mounted controls to save weight. The air conditioning unit is removed, saving 11kg, but can be specified as a no-cost option.

Carbon fibre is used extensively in the cabin, including the steering wheel clasp, gearshift paddles, lower centre console and HVAC shroud, echoing the lightweight MonoCell chassis. All visual carbon fibre is satin finished as standard, rather than gloss. This shows up the carbon weave more clearly and, at just 0.1mm in thickness, the finish saves further weight which all adds up to the overall 100kg saving.

## INFOTAINMENT

Despite the track-focused set up within the cabin of the 675LT, the most engaging and extreme model in the Super Series retains a high level of specification rather than being a conventional 'stripped out' road racer. Standard features include satellite navigation, DAB Digital radio (SIRIUS satellite radio in North America), and a lightweight four-speaker system from audio specialist Meridian. The innovative touchscreen IRIS infotainment system simplifies vehicle commands, reducing the number of switches and buttons in the driver zone. As with all McLaren models, it is set up in portrait, rather than landscape, which is more intuitive and means driver and passenger can sit closer together, optimising weight distribution.

### **FIVE UNIQUE 'BY McLAREN' 675LT THEMES**

As premiered on the 675LT at the Geneva Motor Show, the 'By McLaren' designer interiors represent the pinnacle of the range of trims available. Offered in five bespoke colour themes, never previously offered, each specification has been carefully developed to compliment the exterior paint colour with recommended upholstery and trim detailing, cabin stitching, wheels and brake calliper colours.

The 'By McLaren' colour palette of five colours comprises four new colours formulated for the 675LT. Chicane Grey, Delta Red, Napier Green and Silica White can be specified for the first time, along with the iconic heritage McLaren Orange.

### **McLAREN TRACK TELEMERTY (MTT)**

The track capability of the 675LT is highlighted by the new McLaren Track Telemetry (MTT), which is standard, with data displayed on the IRIS screen. The system provides real-time information, including laptime, sector splits, lap deltas and comparisons between other users. Post-drive analysis is also available with GPS-based track mapping, lap timing and data-logging with graphical plots of vehicle speed and laptime deltas.

As an option, three cameras can be specified which work in conjunction with the data-logging, recording each lap to allow for additional analysis. The cameras are mounted in the front and rear bumpers, and one in the cabin facing forward over the driver's shoulder.

### **FURTHER OPTIONAL SPECIFICATION**

In addition to the standard specification, the 675LT can be comprehensively specified with a full range of further options. Full Nappa leather upholstery can be specified for the carbon fibre racing seats, or an electrically adjustable, heated sports seat option is also available.

A full variety of convenience options can also be specified for the 675LT, including a vehicle lift system and an electric steering column. This can be specified as a stand-alone item or paired with the heated and electric seats, and with a memory function.

## THE STORY OF LT

The story of the McLaren F1 is one of the most famous in automotive history, with the all conquering GTR moving the game on further, worthy of a place in the motorsport hall of fame. After a successful season in 1995 and 1996, McLaren set about raising the bar once more in order to stay ahead of the competition.

While the name and basic architecture remained the same, the 1997 McLaren F1 GTR 'Longtail' – or LT – was completely re-engineered from the ground up, and was the ultimate version of the iconic McLaren F1. With enhanced levels of downforce through extended bodywork, and dramatic weight savings, the end result was the most track-focused derivative of all 106 models to wear the McLaren F1 badge.

The McLaren F1 GTR 'Longtail' raced successfully during the 1997 sports car racing season, including most prominently in the FIA GT championship against specially developed racing 'prototypes', and went within a whisker of winning the world title. Notable achievements included victory in the Silverstone 4 hours, the Hockenheim 4 hours, the Spa 4 hours and a 1-2 class finish – 2-3 overall – at the 1997 24 Hours of Le Mans. Despite racing against the much quicker LMP cars, only one lap separated the #41 McLaren F1 GTR 'Longtail' from outright victory. The nearest opposition in the GT1 class finished nearly 30 laps behind.

And so, McLaren has done it again. 'LT' is now the ultra high-performance brand, re-establishing the McLaren 'Longtail' heritage. As the first model to wear the iconic badge, the 675LT embodies the 'Longtail' ethos, with a focus on light weight, optimised aerodynamics, increased power, track-focused dynamics and driver engagement.

## MANUFACTURING

The 675LT is the most exclusive model in the Super Series: only 500 coupés will be built, and all are sold. They will be produced from July 2015 in the McLaren Production Centre, alongside the McLaren Technology Centre, near Woking, England.

All cars will be hand built, alongside all models from the Ultimate Series (McLaren P1™ GTR and McLaren P1™), the Super Series (650S Coupé, 650S Spider, 625C Coupé and 625C Spider) and the Sports Series (570S Coupé and 540C Coupé) which enters series production later this summer.



## McLAREN 675LT TECHNICAL STATISTICS

### PERFORMANCE

0-97 km/h (0-60 mph)	2.8 seconds
0-100 km/h (0-62 mph)	2.9 seconds
0-161 km/h (0-100 mph)	5.5 seconds
0-200 km/h (0-124 mph)	7.9 seconds
0-300 km/h (0-186 mph)	22.5 seconds
0-400m / ¼ mile	10.45 seconds @ 228 km/h (142 mph)
Top speed	330 km/h (205 mph)
Power-to-weight	549PS per tonne

### BRAKING

100-0 km/h (62 mph)	3.0 seconds, 30.2 m (99 ft)
200-0 km/h (124 mph)	4.5 seconds, 115 m (377 ft)
300-0 km/h (186 mph)	6.9 seconds, 254 m (833 ft)

### ENGINE & POWERTRAIN

Engine Configuration	V8 Twin Turbo / 3799cc
Power	675PS (666 bhp) @ 7,100 rpm
Torque	700Nm (516 lb ft) @ 5,500-6,500 rpm
Transmission	7 Speed SSG
CO <sub>2</sub>	275g/km
Fuel consumption	combined - 24.2mpg (EU), 11.7l/100km urban - 16.1mpg (EU), 17.5l/100km extra urban - 33.2mpg (EU), 8.5l/100km
Engine lubricant	Mobil 1 New Life™ 0W-40

### DIMENSIONS & WEIGHT

Dry weight	1,230kg (2,712 lb)
Weight distribution	42.5 / 57.5
Length	4,546 mm
Width	2,095 mm
Height	1,188 mm

---

Ends



## Notes to Editors:

A selection of high resolution images accompanying this release is available to download from the McLaren Automotive media site – [www.media.mclarenautomotive.com](http://www.media.mclarenautomotive.com).

### About McLaren Automotive:

McLaren Automotive is a British manufacturer of luxury, high-performance sports cars, located at the McLaren Technology Centre (MTC) in Woking, Surrey.

Following the global launch of McLaren Automotive in 2010, the groundbreaking 12C was launched in 2011, the 12C Spider in 2012, and the limited-run McLaren P1™ went into production in 2013. In keeping with its plan to introduce a new model each year, the company unveiled the 650S, in coupe and Spider form in 2014, and has announced the Sports Series among the models to be introduced in 2015. The brand continues to expand, and McLaren posted a profit during 2013 – only the third year of vehicle production. This was followed in 2014, by a third consecutive year of growth in sales with a record 1,649 vehicles delivered via a dedicated global network of retailers in every major automotive market.

### McLaren Automotive Partners

To support the development, engineering and manufacture of its range of innovative and highly acclaimed sports cars, McLaren Automotive has partnered with world leading companies to provide specialist expertise and technology including, AkzoNobel, ExxonMobil, Pirelli and SAP.

### Designed for the track; Developed for the road

The connection between Formula 1 and road cars at McLaren is a natural process of experience, knowledge, principles and process transfer. Through the integration of 50 years of Formula 1™ racing expertise and knowledge, and over 20 years of heritage in producing landmark sports cars, McLaren Automotive designs, develops and builds a range of technologically advanced and groundbreaking high performance sports cars which are designed to be a no compromise drive on both road and track.

McLaren has pioneered the use of carbon fibre in vehicle production over the past 30 years, and since introducing a carbon chassis into racing and road cars with the 1981 McLaren MP4/1 and 1993 McLaren F1 respectively, McLaren has not built a car without a carbon fibre chassis.

Visit [cars.mclaren.com](http://cars.mclaren.com) for more details.

## Further information

### Wayne Bruce

Global Communications Director | McLaren Automotive Limited

**Phone:** +44 (0) 1483 261500

**Mobile:** +44 (0) 7768 132429

**Email:** [wayne.bruce@mclaren.com](mailto:wayne.bruce@mclaren.com)

### Dave Eden

Global PR Manager | McLaren Automotive Limited

**Phone:** +44 (0) 1483 262867

**Mobile:** +44 (0) 7500 857089

**Email:** [dave.eden@mclaren.com](mailto:dave.eden@mclaren.com)

**Twitter:** [www.twitter.com/DaveEden](http://www.twitter.com/DaveEden)

**Media website:** [www.media.mclarenautomotive.com](http://www.media.mclarenautomotive.com)

**Facebook:** [www.facebook.com/mclarenautomotive](http://www.facebook.com/mclarenautomotive)

**Twitter:** [www.twitter.com/McLarenAuto](http://www.twitter.com/McLarenAuto)

**You Tube:** [www.youtube.com/mclarenautomotivetv](http://www.youtube.com/mclarenautomotivetv)

