

Media release

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## The new McLaren 750S: peak supercar performance, pure exhilaration

- New 750S is the lightest and most powerful series-production McLaren, with segment-leading power-to-weight ratio of 587PS-per-tonne (coupe, at lightest dry weight) – a 22PS advantage over its closest competitor
- New rear-wheel drive, V8-engined supercar takes outstanding attributes of renowned 720S to new heights
- Meticulous analysis of benchmark predecessor sees around 30% of components new or changed, making 750S more powerful, lighter, quicker and even more thrilling and engaging
- Carbon fibre monocoque construction is core to low vehicle weight – 750S is lighter than 720S by 30kg (DIN) and at lightest dry weight of just 1,277kg, a remarkable 193 kg less than its closest competitor
- Carbon fibre-shelled racing seats and the lightest wheels ever fitted as standard on a series-production McLaren among features that deliver weight-reduction
- Carbon fibre upper structure and composite Retractable Hard Top (RHT) mean Spider is only 49kg heavier than coupe
- Twin-turbocharged 4.0-litre V8 petrol engine now produces 750PS and 800Nm; 7-speed transmission with revised ratios optimises acceleration
- Astonishing levels of performance: 0-100km/h in 2.8 seconds; 0-200km/h in 7.2 seconds (Spider 7.3 seconds) – quicker than its closest competitor
- Increased downforce and even better aerodynamic balance than 720S
- New interior is even more driver-focused and sets new standards for engagement with displays and controls
- New driver-centric, column-mounted instrument display flanked by rocker switches that control Active Dynamic settings is a McLaren innovation that allows suspension and powertrain modes to be changed with hands on the steering wheel
- Apple CarPlay® standard, as are USB-C and USB-A for fast charging of devices
- Exclusive new McLaren Control Launcher (MCL) feature allows the driver to store a favourite combination of aero, handling, powertrain and transmission settings and return to this with the push of a button
- Centre-exit exhaust inspired by McLaren P1™ delivers a new, distinctive crescendo

- Newest generation of McLaren's acclaimed linked-hydraulic suspension – PCC III – debuts on 750S, featuring bespoke accumulator tuning, new lightweight springs and dampers and revised geometry and delivering even greater agility, feel and feedback
- Renowned McLaren steering with electro-hydraulic assistance sharpened with faster steering ratio; new power-assistance pump for greater refinement
- New track brake upgrade available, combining ceramic discs and monobloc calipers derived from McLaren Senna system with a new booster and vacuum pump
- New vehicle-lift system operated by a single button raises front of car in just four seconds – less than half the time of its predecessor and faster than any other McLaren
- Extended front splitter, narrower eye-socket intakes, new rear wheelarch vents, lengthened carbon fibre active rear wing and new front and rear bumpers
- TechLux and Performance interior themes offer full Nappa leather or Alcantara and Nappa leather materials
- High-profile interior options include Super-Lightweight Carbon Fibre Racing Seats and a new Bowers & Wilkins premium audio system
- The new 750S is available to order now from McLaren retailers

With the new 750S, McLaren defines a new benchmark for supercar performance and driver exhilaration.

The lightest and most powerful series-production McLaren, the new V8-engined, rear-wheel drive 750S – which is available in coupe and convertible form – is unashamedly a supercar for the purist. Designed and engineered following meticulous analysis of the renowned McLaren 720S, the new 750S combines advances in weight-saving, powertrain performance, aerodynamics and dynamic excellence to elevate a benchmark driving experience to new heights. Around 30 per cent of 750S components are either new or changed in order to deliver these improvements and with them an even greater emotional connection to the car.

*“When you have a car recognised by so many drivers as a benchmark, to do something even better you have to examine every detail and really push hard for improvements that raise the bar again. This is what we have done with the new 750S and the light weight, V8 engine performance and outstanding dynamic abilities combine to deliver a supercar driving experience that hits new heights, with truly exhilarating levels of emotional connection.”*

Michael Leiters, CEO, McLaren Automotive

With all available carbon fibre and lightweight options selected, the coupe weighs 1,277kg in dry lightest form, which delivers a segment-leading power-to-weight ratio of 587PS-per-tonne. This is

a remarkable 193kg lighter than its closest competitor and delivers a power-to-weight advantage of 22PS.

The 750S Spider is designed with the same focus on minimising weight. It features a Retractable Hard Top (RHT), rollover protection system and a bespoke rear upper structure to the monocoque constructed from carbon fibre, but such is the strength of the carbon fibre monocoque that no additional reinforcement is needed. This ensures the Spider is equally impressive in power-to-weight terms and segment-leading at 566PS-per-tonne, at its lightest dry weight of 1,326kg.

The extraordinary levels of exhilaration, precision, agility, feel and feedback that the 750S delivers are immediately apparent to the driver, even at lower speeds – and its low weight is a key factor in its dynamic performance. At just 1,389kg (DIN), it weighs 30kg less than a 720S – a clear example of McLaren’s dedication to lightweight engineering. This philosophy of performance-based innovation is evidenced by features such as carbon fibre-shelled racing seats that are a combined 17.5kg lighter than the base seats in a 720S. New 10-spoke ultra-lightweight forged wheels are the lightest ever fitted as standard on a series-production McLaren and save 13.8kg. The new driver instrument display is lighter by 1.8kg. Even the windscreen glass contributes to weight reduction, providing a 1.6kg saving.

The 4.0-litre, twin-turbocharged V8 engine with power of 750PS and torque of 800Nm provides ferocious performance, with the 750S capable of 0-100km/h in 2.8 seconds and 0-200km/h in 7.2 seconds (Spider 7.3 seconds). This is quicker than its closest competitor on both measures. In-gear acceleration is amplified by optimised transmission gearing and a revised kickdown control strategy.

McLaren’s Proactive Chassis Control linked-hydraulic suspension, which is renowned for combining astonishingly precise body control with a remarkably compliant ride, is now even more impressive in new PCC III form. The new-generation system delivers even higher levels of suspension performance and is integral to the outstanding dynamic abilities of the 750S.

The suspension springs are softer at the front and stiffer at the rear than in the 720S, which together with reconfiguration of both the passive and active elements of the bespoke valve stack and a new approach to tuning the suspension – adjusting the accumulators in the struts, which is used for the first time in 750S – benefits ride comfort, roll control, steering feedback and cornering balance. Additionally, new spring and damper design reduces weight by 2kg.

The combined hardware and software changes made for PCC III mean the dynamic breadth of 750S is even greater than its predecessor, McLaren’s new benchmark supercar maintaining 720S levels of comfort while delivering significantly improved circuit performance.

The 750S is also more agile than the benchmark car it replaces, with better front-end grip – helped by a 6mm wider front track and new suspension geometry – and McLaren’s electro-hydraulic steering, which is widely recognised for its precision and clarity of feedback, now having a faster steering ratio and new power-assistance pump.

The interior of the 750S fuses innovative technology with exquisite materials, but most importantly is even more driver-focused in design. At the heart of the driver experience are new displays – both for information and instruments, with the instrument display fitted to – and moving with – the steering column. This driver-centric display is mounted in a binnacle that has the controls to select Powertrain and Handling modes located on either side, meaning the driver can move effortlessly between Comfort, Sport and Track Active Dynamic settings while keeping their hands on the wheel and a complete focus on the road ahead.

The McLaren Control Launcher (MCL) is another new McLaren technology that debuts on 750S and adds yet another dimension to the driver’s interface with the car. Activated using a button featuring the famous McLaren Speedmark, MCL allows the driver to personalise their McLaren driving experience by storing a bespoke dynamic preference – their favourite combination of aero, handling, powertrain and transmission settings – that can instantly be recalled with a push of the MCL button.

Drivers will also benefit from new features such as Apple CarPlay® and the new Central Information Screen, which features richer, even more detailed graphics to further enhance the driver experience. The Rear View and Surround View camera system are also upgraded, for higher definition and clarity and a new vehicle-lift system raises the front of the 750S in only four seconds compared to the 10 seconds it takes in a 720S.

A heightened physical and emotional connection between driver and car is aided by bespoke engine mount tuning, as well as a new central-exit exhaust layout inspired by the McLaren P1™ that is acoustically tuned to give a distinctive clear tone and sharp crescendo at high engine speeds.

750S customers planning extensive circuit driving can opt for a track brake upgrade engineered using ceramic discs and monobloc calipers derived from the McLaren Senna system, together with a new brake booster and vacuum pump and Formula 1-inspired integrated caliper cooling technology. New Super-Lightweight Carbon Fibre Racing Seats are also available as an option, as are track-focused Pirelli P ZERO™ Trofeo R tyres and lightweight titanium wheel bolts.

Visually, the 750S refines its predecessor’s design with a new lower nose section featuring an extended front splitter, narrower ‘eye socket’ intakes that enclose the headlights, new sill air intakes and rear wheelarch vents. Rear aerodynamic revisions incorporate a redesigned and

lengthened rear deck that channels air towards a distinctive raised and lengthened carbon fibre active rear wing, positioned above the central-exit exhaust.

Headlight surrounds are now optionally body coloured or in carbon fibre. The new rear bumper and front bumper vents are also available in McLaren's signature lightweight material.

The carbon fibre monocoque construction facilitates near 360-degree visibility, with a low scuttle, ultra-slim A-pillars and on the coupe, glazed C-pillars, all benefitting the spread of natural light into the cabin. Crisp, new, customisable ambient lighting highlights cabin design details at night and on the coupe, the V8 engine can be visible from within the cabin via a double-glazed panel set in the rear luggage shelf, exposing the top of the powertrain behind the driver's shoulder.

The 750S Spider features glazed flying buttresses that, as well as guiding airflow over the rear tonneau, enhance rearward visibility. To bring additional light into the cabin, the Retractable Hard Top (RHT) is optionally available with electrochromic glass, enhancing the feel of an open-air environment, even with the roof closed. The RHT can be opened in under 11 seconds at vehicle speeds up to 50km/h (31mph).

A full Nappa leather-trimmed interior or a combination of Alcantara and Nappa leather are available with new TechLux and Performance interior themes. McLaren's audio partner, Bowers & Wilkins, has developed a new system for the 750S, with a more powerful amplifier and the company's proprietary Continuum® cone speakers.

A comprehensive three-year vehicle warranty and a three-year scheduled maintenance/service plan are included as standard with the new 750S, which is available to order now.

## McLAREN 750S IN DETAIL

### MINIMISING WEIGHT FOR MAXIMUM BENEFIT

McLaren's philosophy of super-lightweight engineering is inherent in the new 750S. Already 30kg lighter than the 720S coupe at 1,389kg (DIN), the weight of the new supercar can be further reduced with additional carbon fibre and lightweight options. With all of these components selected, in dry lightest form the 750S coupe weighs just 1,277kg. This is 193kg lighter than the closest rival and in conjunction with the 750PS of the engine gives a segment-leading power-to-weight ratio of 587PS-per-tonne – a 22PS advantage over the competition and a combination that delivers exceptional levels of performance and dynamic excellence.

The carbon fibre-shelled racing seats fitted as standard are a combined 17.5kg lighter than the sports seats previously standard-fit on the 720S. Where local market legislation allows, the

passenger seat is fixed as standard, but can be specified with adjustable rails if required. A new 10-spoke ultra-lightweight forged alloy wheel is the lightest ever fitted as standard on a series-production McLaren supercar and brings a significant 13.8kg weight reduction over 720S.

The McLaren 750S Spider has an inherent advantage over rival open-top supercars built with aluminium and steel because of the inherent stiffness and rigidity advantages of carbon fibre. The Spider needs no additional strengthening, and the changes from the coupe – the Retractable Hard Top (RHT), integrated rollover protection system and bespoke rear upper structure – are all constructed from carbon fibre. The new convertible supercar weighs just 1,438kg (DIN) – again, 30kg less than the 720S Spider. Its weight in dry lightest guise is 1,326kg.

Super-Lightweight Carbon Fibre Racing Seats are available as an option. Crafted in carbon fibre, the seats use an innovative double-skin shell technology that reduces weight by 33% in comparison with the same seat shell produced using conventional carbon manufacturing techniques. Each shell weighs just 3.35kg.

## FOCUSED ON DRIVING EXHILARATION

*“We set ourselves an extremely difficult challenge with 750S, namely bringing a significant degree of McLaren ‘Longtail’ agility, feel and feedback, while ensuring that comfort and usability are not compromised – the ‘best of both’ combination that our customers tell us they want. The result is a huge breadth of abilities for benchmark supercar dynamic performance.”*

Jamie Corstorphine, Director of Product Strategy, McLaren Automotive.

The goal for the 750S development programme was to increase driver engagement and performance while also stretching the dynamic breadth of the car. This process focused on enhancing agility, feedback and connection to increase the ‘sense of fun’ behind the wheel.

Suspension system developments engineered for 750S include new geometry – the front track is 6mm wider than on 720S – and a new coil spring and damper design that reduces weight by 2kg. The 750S features a new generation of McLaren’s renowned Proactive Chassis Control linked-hydraulic suspension. Achieving the seemingly incompatible combination of precise body control and a compliant ride – but at an even higher level – PCC III combines passive coil springs (which control ride frequency); semi-active dampers (with fully controllable compression and rebound); and a hydraulic roll circuit in place of conventional mechanical anti-roll bars.

The driver-selectable modes change both damper settings and roll stiffness, to alter the character of the vehicle. With the hydraulic circuit able to achieve greater roll stiffness than any conventional set-up, there is very little body roll during cornering. Front spring rates are 3% softer than those of the 720S and rear spring rates 4% firmer, benefitting both ride comfort and



dynamic precision and control. On the rear axle, increased spring stiffness improves vehicle balance on track through more neutral mid-corner balance and superior roll support. Front-to-rear spring balance is further harmonised, enhancing how the 750S 'breathes' over road undulations to improve high-speed motorway refinement.

The tuning of the compression and rebound of the dampers expands the dynamic bandwidth of the 750S, while new construction and material technologies ensure a more repeatable response, no matter the temperature, environment or subjective loads. A new way of tuning dampers – adjusting the accumulators in the struts – was also used to perfect 750S.

The passive hydraulic valves and electronic valves in the semi-active dampers have been engineered to embrace a specific focus on low-speed performance, improving steering response and ensuring both axles respond in harmony, giving the 750S a compact and agile feeling. On each axle, the new dampers work with the corresponding change in spring rates – for instance, stiffer rear springs allow for more compliant rear dampers, while still maintaining control of the car. On the 750S Spider, the damping characteristics consider the minimal weight difference versus the coupe.

Mitigating bump steer – where the vertical movement of a front wheel affects the suspension toe position – was particularly important to the development team. By neutralising this effect, vertical suspension stiffness and steering response can be decoupled, allowing for a faster transient steering response and therefore greater agility.

McLaren's electro-hydraulically assisted steering is renowned for the superior feedback and connection it delivers to drivers. On the 750S, it has been further honed with a faster steering ratio and greater steering linearity, ensuring driver inputs are reflected as purely as possible. In combination with the new spring balance, new damper valve definitions and bump steer mitigation, this delivers a vehicle with sharper turn-in that is even more agile and inspires even greater driver confidence.

The new hardware and software augment the dynamic abilities of the 750S while improving the comfort and usability that the McLaren 720S offered. For the driver, the choice of vehicle character is by choosing between three Handling modes – Comfort, Sport, or Track – with each focused on a different driving experience according to personal preference and conditions.

For drivers wishing to explore the full dynamic abilities of the 750S, McLaren Variable Drift Control, or VDC, allows them to adjust the intervention level of the traction control system independently of the Electronic Stability Control (ESC) setting. This adjustability means the driver can move seamlessly from the stage where the car's electronic systems are intervening regularly to a stage where they are not intervening at all.

Formidable braking performance is enhanced by the larger surface area of the active rear wing, which fully deploys in less than half-a-second, increasing rear downforce to improve high-speed stability under braking and reduce braking distances. The carbon ceramic discs are paired with a new brake booster that improves pedal feel and modulation.

For 750S customers intending to use their vehicles extensively on race circuits, a new track brake upgrade comprising 390mm carbon ceramic discs and monobloc calipers. The discs take seven months to create – seven times longer than a conventional carbon ceramic component – but are 60% stronger and have four times the thermal conductivity. These virtues increase braking performance without a corresponding increase in the size or weight of the disc, yet also reduce brake fade and wear rates.

The combination of discs and monobloc front calipers derived from the McLaren Senna with a new brake booster and vacuum pump and Formula 1-inspired integrated caliper cooling ensures the track brake upgrade delivers precise pedal feel and consistency and incredible stopping performance under even the most arduous circuit conditions.

The surface area of the lengthened active rear wing is 20% greater than the wing of the 720S – further optimising aerodynamic efficiency – yet the component is lighter by 1.6kg due to its carbon fibre construction. A cut-out in the centre section maintains rear visibility and also ensures that high temperatures from the exhaust do not impact the wing when the vehicle is stationary after extended circuit running.

The hydraulically actuated wing is built at the state-of-the-art McLaren Composites Technology Centre (MCTC) in Yorkshire, UK, using new production methodologies unique to the 750S. Deployed at angle configurations and vehicle speeds that are individual to the coupe and the Spider, there are three main operational positions:

- Driver Downforce (active wing partially deployed, dependent on speed) is engaged when the Aero button is pushed in the cabin, increasing downforce levels during high-speed cornering
- DRS automatically delivers drag reduction functionality when accelerating in a straight line, up to the maximum vehicle speed
- High Speed Braking fully deploys the active wing in less than half-a-second, delivering significantly increased rear downforce that improves high-speed braking stability and reduces braking distances

The 750S is fitted as standard with Pirelli P ZERO™ tyres, with even higher-performance Pirelli P ZERO™ Corsa and racetrack-focused Pirelli P ZERO™ Trofeo R tyres as options. All three tyres are



engineered specifically for the 750S by McLaren and its tyre technical partner Pirelli, as are the Pirelli P ZERO™ Winter tyres available from McLaren retailers.

10-spoke Ultra-Lightweight 'Turbine' wheels, 10-Spoke Super-Lightweight Forged Alloy 'Strike' wheels and 5-Twin Spoke Ultra-Lightweight Forged Alloy 'Vortex' wheels are offered, in a variety of finishes depending on wheel design: Silver, Dark Stealth, Gloss Black Diamond Cut, Gloss Black and new gold Orum. Buyers can also specify the 'Strike' wheel in a Dark Stealth finish with a McLaren Orange rim.

## METICULOUSLY CRAFTED; DRIVER FOCUSED

*"Just as the vehicle dynamics team focused on letting 750S drivers really 'feel' the enhanced performance, our designers worked to highlight the high-tech, driver-centric nature of the cabin. Features such as the new steering column-mounted instrument display with Active Dynamics controls incorporated and the HD display screens are immediately apparent, but everywhere you look or feel, the quality and craftsmanship of the 750S is evident."*

Sandy Holford, 750S Chief Engineer, McLaren Automotive

The cabin of the McLaren 750S is unashamedly driver-focused. Advanced technologies are fused with exquisite materials, but one of the most innovative elements is largely hidden from sight: beneath the soft leather and finely textured Alcantara surfaces is a strong and stiff carbon fibre monocoque that is inextricably linked to Formula 1.

When McLaren introduced the ground-breaking MP4/1 race car in 1981, its carbon composite monocoque was clearly superior to steel and aluminium alternatives. Immense structural rigidity created an incredibly stable platform that enhanced dynamic performance, and the light weight – only possible with carbon fibre construction – brought immediate benefits to acceleration, braking and dynamic performance.

More than four decades on, the monocoque at the heart of the 750S – while a high-tech world away from the MP4/1 – retains all of the benefits that advanced carbon fibre construction brings. The dihedral doors of the 750S coupe hinge dramatically upwards as they open, taking with them a section of roof, because the upper section of the monocoque can effortlessly support such a wide opening in its structure. This inherent strength is the same reason that the 750S Spider – which features its own bespoke doors – needs no additional structure reinforcement to incorporate a convertible roof.

The advantages of carbon fibre enable design of the ultra-slim A-pillars that aid forward visibility and the glazed C-pillars of the coupe and the compact tonneau buttresses of the Spider that improve over-the-shoulder visibility. Should a customer desire, elements of the carbon fibre

structure within the cabin can be showcased in visible carbon fibre to underline the authenticity of the construction.

With the V8 engine so integral to the appeal of the 750S, McLaren's personalisation programme gives coupe customers the option to specify a double-glazed panel with branded carbon fibre frame within the rear luggage shelf to expose the top of the powertrain. This is visible over the driver's shoulder and visually brings the engine into the interior. It can also be seen from outside the vehicle, through the rear screen.

Carbon fibre is also used for the integrated frame and panel of the Spider's one-piece Retractable Hard Top (RHT). Driven by eight electric motors, the operating mechanisms are near silent, and the strength and lightness of the RHT enables the roof to open or close in 11 seconds at vehicle speeds up to 50km/h (31mph).

The new suite of driver controls introduced on the 750S is no less technically advanced and brings significant benefits. The new driver-centric instrument display is in a binnacle that is mounted on – and moves with – the steering column. The binnacle also features the controls for the Active Dynamics functions on either side, meaning a driver doesn't have to take their hands off the wheel to select Powertrain and Handling modes.

The steering column – now electrically powered as standard – and the beam structure on which the driver display is mounted are both new and stiffer, contributing to an improvement in NVH (Noise, Vibration, Harshness) properties.

The area adjacent to the central touchscreen, where the Active Dynamics switches were located on the 720S, now houses the buttons that control Launch and Aero settings, in an easier-to-use location. This is also where the control for an exclusive new driver technology feature that debuts on the 750S – the McLaren Control Launcher (MCL) – is sited. The MCL allows a driver to save their favourite configuration of aero, handling, powertrain and transmission settings using a button that features the famous McLaren Speedmark logo. This bespoke dynamic setting can be recalled with a single press of the same button to immediately return to their personalised McLaren driving experience.

As with all McLaren vehicles, the steering wheel of the 750S is deliberately free from any buttons or switches, allowing the driver to focus upon the feel and feedback from the chassis and road. Information and infotainment detail is accessed through the new driver display and the optically bonded, touch-sensitive Central Infotainment Screen (CIS), the latter enhanced by richer graphics and increased touch sensitivity. The Rear-View camera and Surround View system have both been upgraded for higher definition and clarity and the quality of the in-car microphone has also been improved for greater voice command accuracy and clearer hands-free calling.

Driver convenience features include Apple CarPlay®, allowing smartphone mirroring and the use of defined apps from the Central Infotainment Screen. An upgraded in-car audio system developed in conjunction with McLaren's audio partner, Bowers & Wilkins, can also be specified as an option. Since 2015, Bowers & Wilkins high-performance audio systems have been available in every McLaren, the acoustic technologies maximising audio performance and pushing the boundaries of loudspeaker capability. To achieve the goal of revealing as much of the original recording as possible, new audio system elements in the 750S include a more powerful amplifier and the company's proprietary Continuum® cone speakers. Radio reception is improved by a new antenna.

The hardware of the vehicle-lift system has been comprehensively re-engineered, and it now raises the front of the 750S in only four seconds (10 seconds for the 720S) – although owners may not call on it too often as the lengthened front splitter has no impact on approach angles. The 750S Spider additionally features two switches – located between driver and passenger – that independently control the RHT and rear window glass.

## THE PUREST EMOTIONAL CONNECTION

*"All McLarens are precisely engineered and remarkably rapid, but with the new 750S we have focused on enriching the full range of characteristics that deliver the exhilaration experienced when driving the car, that pure emotional connection so sought after by enthusiasts."*

Ben Gulliver, Head of Vehicle Development, McLaren Automotive

True to its name, the McLaren 750S can call on up to 750PS from its 4.0-litre V8 engine. And with 800Nm of torque, the new supercar eclipses the petrol-engine outputs of the legendary McLaren P1™ (737PS and 720Nm). These numbers not only underline the incredible rate of progress, but also the astonishing levels of performance available to McLaren 750S drivers.

The engineering developments advance the renowned daily usability of the 720S, and yet the power and performance of the 750S is more full-blooded and undiminished than ever. Outright acceleration is phenomenal, with 0-100km/h (62mph) achieved in 2.8 seconds, 0-200km/h (124mph) in 7.2 seconds (Spider 7.3 seconds) and 0-300km/h (186mph) in less than 20 seconds (Spider 20.4).

The figures give the facts, but it is the visceral sensation of performance and speed that astounds and excites. From the moment the V8 comes to life, through the immense torque delivery in the twin-turbo engine's mid-range and the thrilling climb to the rev limiter at 8,500rpm, the driver's emotional connection to the 750S is extraordinary, and an experience that is becoming increasingly rare and sought after.

The V8 engine – mid-mounted for ideal weight distribution, handling balance and purity of response – is optimised for very high performance, with a flat-plane crankshaft; race-inspired dry sump lubrication; lightweight connecting rods that reduce powertrain mass; and electronically controlled turbocharger wastegates to provide precise boost pressure regulation.

The unique McLaren M840T engine developed for the 750S sees the boost pressure of the ultra-low inertia, twin-scroll turbochargers increased, raising air pressure within the cylinders. In conjunction, an additional high-flow fuel pump meets the greater fuel flow pressure requirements. For optimal efficiency, the second pump only ‘tops up’ pressure when demand is higher.

Lightweight pistons – the same as those in a 765LT – reduce inertia mass, while a bespoke engine management system controls the increased power and torque. Alongside the focus on maximum driver engagement, these electronics also optimise the powertrain to run on high-octane 99 RON fuel.

Complementing the increased power and torque of the engine is a transmission with a shorter final drive ratio, resulting in even quicker acceleration, with 0-200km/h (0-124mph) possible in 7.2 seconds (750S Spider: 7.3 seconds). The transmission is a 7-speed sequential shift unit, engineered for the highest performance applications; the pinion and crown wheel within the transmission final drive, for example, is made from 20NiCrMo, a high-performance nickel chromoly alloy more often seen Formula 1.

On track, a new ‘limit downshift’ transmission function means that if the driver calls for a downshift that would over-rev the engine, the software acknowledges the request but changes down only when engine speed and road speed can be harmonised. This feature is available in Sport and Track modes, and when braking pressure exceeds a certain threshold. It delivers greater freedom for the driver on when to select gear changes and creates an intense audible experience by allowing the engine revs to ‘bounce’ momentarily on the rev-limiter before the next gear engages.

Complementing the outright performance, the enhancements in the powertrain are intensified through a heightened physical and emotional connection. As the primary contributor to transferring and radiating the engine’s low-frequency sounds, the engine mounts are tuned to ensure that the V8 can be both heard and felt to optimal effect. The lateral and diagonal links in particular intensify the sense of connection felt in situations such as engine start-up and dynamic driving but limit the sensations when excessive low-frequency sounds would be unpleasantly intrusive, for instance when cruising on a motorway.

Formed in stainless steel, the new central-exit exhaust system is lighter by 2.2kg than that of a 720S. As well as contributing to weight reduction, it delivers a new and clear exhaust tone. In technical terms, this is achieved by reducing the 2nd and 6th order sounds and allowing the 4th order acoustics to dominate. Having experimented with multiple single- and dual-tailpipe exhaust designs, McLaren engineers also improved the 8th order sounds, creating a greater crescendo at high engine speeds.

## **AERODYNAMICALLY INNOVATIVE; ORGANICALLY BEAUTIFUL**

*“The new 750S further sharpens McLaren’s ‘form follows function’ design philosophy, the organic form of the car enhanced by reprofiled ‘eye sockets’ and a larger active rear wing. The aluminium, carbon fibre and composite bodywork is visually elegant but has the aerodynamic features incorporated, so when you look into the intakes and ducts you can understand how the airflow is controlled.”*

Sandy Holford, Chief Engineer, McLaren 750S

The focus of every McLaren is the driver, and that philosophy comes to the fore in the design of the new 750S interior that places them right at the heart of the vehicle, with near 360-degree visibility in a canopy-like cabin. Before a driver ever fully experiences the 750S in action, it is this fundamental way of thinking that sets the scene.

A deep and broad windscreen and narrow A-pillars provide unparalleled sight lines over the raised front wings, assisting the driver in precisely placing the 750S on the road. The coupe features transparent, glazed C-pillars – made possible by the carbon fibre Monocage II – and an expansive rear screen to ensure unrivalled over-the-shoulder visibility. The rearwards positioning of the B-pillars creates a sense of incredible cabin space.

The 750S Spider features the same narrow A-pillars, and the carbon fibre lower structure is also identical to the coupe. However, the 750S Spider’s Monocage II-S architecture has a bespoke carbon fibre structure above the engine bay to accommodate the carbon fibre rollover protection system (ROPS) and Retractable Hard Top (RHT). The tonneau buttresses that shroud the compact ROPS, together with glazed flying buttresses that create a high-pressure zone over the rear tonneau cover to reduce rear axle lift, aid the visibility that is so important to McLaren drivers on road and track.

Viewed from above, the 750S driver sits in a teardrop shape that tapers to a focal point near the new central-exit exhaust. Using the cooling solutions developed for the 720S, visible intakes are hidden within the double-skinned dihedral doors. This is one of many concepts present across the organic shape of the 750S that together maximise downforce, minimise drag, enhance powertrain cooling and optimise aerodynamic balance.

In the nose of the car, 'eye sockets' perform a double function, integrating digital LED lighting with a unique intake path for the low-temperature radiators, all while minimising drag. Just as intakes cut down deep inside the doors of the 750S, so too do these aero ducts slice into the bodywork of the vehicle, functionally highlighting how cooling airflow is driven into key areas.

The eye sockets are dissected by sequential indicators that sweep through thin LED light strips. Below them are the aero ducts that feed a low-temperature radiator (LTR) on each side of the car, cooling the seven-speed transmission and charge air coolers. Above them are particularly slim LED headlights, which are now deeply hooded following revisions to the surrounding bodywork. The reprofiling does not impact the airflow into the LTRs, but instead narrows the gap between headlight and bodywork.

A new extended front splitter – providing aerodynamic balance in combination with the enlarged active rear wing – and new front bumper with sharper form language, dissect airflow at the leading edge of the 750S. The air is driven into the eye-socket intakes, channelled over and around the contoured nose of the 750S, or directed down to the flat underfloor.

Once controlled at the front of the 750S, airflow is guided rearwards, the air managed between the windscreen pillars and an expansive gap created by the outboard positioning of the mirrors into deep channels within the double-skinned doors. The fast-moving airflow improves cooling performance of the high-temperature radiators (HTRs), limiting the size and mass of radiators required for powertrain cooling. In turn, this reduces unnecessary weight.

The outer surface of each door blade controls turbulent airflow from across the front wheels, while a hidden duct behind extracts air from within the front wheelarches, benefitting overall aerodynamic efficiency.

Subtle channels incorporated in the lower section of the sculpted doors guide air towards sill intakes ahead of the rear wheels. These intakes, which have been enlarged on the 750S, optimise airflow to maximise radiator efficiency. Together with other changes to the rear of the car – new deck, new mesh grille and new bumper – the revised sill intakes provide the additional cooling performance required to support an increase of 30PS and 30Nm.

The removal of the fixed roof for the 750S Spider necessitates a revised gas strut position and door hinge system, but in this area, the only visible exterior differences to the 750S coupe are a longer front wing, shorter door and frameless window surround.

The design and positioning of the single, central exhaust pipe meant that the new active rear wing is positioned 60mm higher, its revised static position bringing additional powertrain cooling by drawing hot air out of the engine bay.



An additional enhancement to the 750S is the venting from the rear wheelarches; by pushing the bumper closer to the engineering hard points the rear tyres have been exposed, which reduces air pressure within the wheelarches. The resulting shape of the rear bumper has less physical volume and serves to guide the expelled air upwards.

The interior of the 750S is trimmed as standard in Alcantara, with two further interior themes available to define the character of the vehicle. The Performance interior combines Alcantara with fine Nappa leather and the TechLux specification has Nappa leather throughout. Both selections are available in understated black colours, with an optional contrast stitch if the customer wishes.

Alternatively, a variety of interior colourways can introduce vivid red and oranges, rich tans and dark blue inks, or more restrained porcelains and teals. A new dark metal cabin finish and crisp new customisable ambient lighting that delicately highlights design details at night complement the new interior themes.

Beyond the selection of standard exterior paint finishes, a range of Elite colours are available. McLaren Special Operations (MSO), the bespoke arm of McLaren Automotive, can collaborate with customers on additional choices, or work with them to create a bespoke paint of their own.

## GUARANTEED PEACE OF MIND

The McLaren 750S vehicle warranty runs for three years from the date of new purchase, without mileage limitation. A three-year scheduled maintenance/service plan is also included as standard, with normal service intervals for the 750S at one year or 15,000 km/10,000 miles, whichever occurs first. Paint surface is warranted for three years, visible cosmetic corrosion for five years and perforation corrosion of the vehicle body for 10 years.

Additionally, the 750S is eligible to be covered by the McLaren Extended Warranty, which is available in 12- or 24-month periods from time of first purchase until the vehicle is 15 years old.

## McLaren 750S: Technical Specification

Engine configuration	M840T engine, 4.0-litre twin-turbo V8, 3,994cc
Drivetrain layout	Longitudinal mid-engined, RWD
Power PS (bhp/kW) @ rpm	750 (740/552) @ 7,500rpm
Torque Nm (lb ft) @ rpm	800 (590) @ 5,500rpm
Transmission	7 Speed SSG. Comfort, Sport and Track modes
Steering	Electro-hydraulic; power-assisted
Chassis – coupe	Carbon fibre Monocage II monocoque with aluminium front and rear crash structures

Chassis - Spider	Carbon fibre Monocage II-S monocoque with aluminium front and rear crash structures
Suspension	Independent adaptive dampers, dual aluminium wishbones, hydraulically linked PCC III system. Comfort, Sport and Track modes
Brakes	Carbon Ceramic Discs (390mm front; 380mm rear) with aluminium brake calipers (6-piston front; 4-piston rear)
Wheels (inches)	Front: 19 x 9J; Rear: 20 x 11J
Tyres	Pirelli P-ZERO™ standard. Front: 245/35/R19 93Y (XL); Rear: 305/30/R20 103Y (XL) Pirelli P-ZERO™ Corsa and P-ZERO™ Trofeo R available as options.
Length, mm (inches)	4,569 (180)
Wheelbase, mm (inches)	2,670 (105)
Height, mm (inches)	1,196 (47)
Width, with mirrors, mm (inches)	2,161 (85)
Width, mirrors folded, mm (inches)	2,059 (81)
Width, without mirrors, mm (inches)	1,930 (76)
Track (to contact patch centre), mm (inches)	Front: 1,680 (66); Rear: 1,629 (64)
Lightest dry weight, kg (lbs) - coupe	1,277 (2,815)
Lightest dry weight, kg (lbs) - Spider	1,326 (2,923)
DIN weight [fluids + 90% fuel], kg (lbs) - coupe	1,389 (3,062)
DIN weight [fluids + 90% fuel], kg (lbs) - Spider	1,438 (3,170)
Fuel tank capacity, litres (UK/USA gallons)	72 (15.8/19)
Luggage capacity, litres - coupe	Front: 150 Rear: 210
Luggage capacity, litres - Spider	Front: 150 Rear: 58

### Performance data

0-97km/h (0-60mph) - coupe and Spider	2.7 seconds
0-100km/h (0-62mph) - coupe and Spider	2.8 seconds
0-200km/h (0-124mph) - coupe	7.2 seconds
0-200km/h (0-124mph) - Spider	7.3 seconds
0-300km/h (0-186mph) - coupe	19.8 seconds
0-300km/h (0-186mph) - Spider	20.4 seconds
0-400m / ¼ mile - coupe	10.1 seconds
0-400m / ¼ mile - Spider	10.3 seconds
Maximum speed - coupe and Spider	332 km/h (206 mph)
200-0km/h (124mph-0) braking, metres (ft) - coupe and Spider	113 (371)
100-0km/h (62mph-0) braking, metres (ft) - coupe and Spider	30.0 (98.0)

### Efficiency

CO2 emissions, g/km WLTP EU (combined) – coupe and Spider	276
Fuel consumption, WTLP EU I/100km (UK MPG)	
Combined – coupe and Spider	12.2 (23.2)
Fuel consumption, Federal/United States mpg	
City – coupe and Spider	TBC
Highway – coupe and Spider	TBC
Combined – coupe and Spider	TBC

Ends

Notes to editors:

A selection of high resolution images accompanying this release is available to download from the McLaren Automotive media site – [cars.mclaren.press](https://cars.mclaren.press)

**About McLaren Automotive:**

McLaren Automotive is a creator of luxury, high-performance supercars. Every vehicle is hand-assembled at the McLaren Production Centre (MPC) in Woking, Surrey, England.

Launched in 2010, the company is now the largest part of the McLaren Group.

The company’s product portfolio of GT, supercar, Motorsport and Ultimate models are retailed through over 100 retailers in over 40 markets around the world.

McLaren is a pioneer that continuously pushes the boundaries. In 1981, it introduced lightweight and strong carbon fibre chassis into Formula 1 with the McLaren MP4/1.

Then in 1993 it designed and built the McLaren F1 road car - the company has not built a car without a carbon fibre chassis since. As part of the Ultimate Series, McLaren was the first to deliver a hybrid hypercar, the McLaren P1™. In 2016, it announced a new hybrid hyper-GT and confirmed in 2018 that the next Ultimate car would be the Speedtail.

2019 saw McLaren launch the 600LT Spider, the new GT and the track-only McLaren Senna GTR. It also unveiled the 620R and McLaren Elva before launching the 765LT the following year.

Most recently, the company unveiled its all-new high-performance hybrid supercar, the McLaren Artura.

The Artura is the first McLaren to benefit from the McLaren Carbon Lightweight Architecture (MCLA). The MCLA is designed, developed and manufactured at the McLaren

Composites Technology Centre in the Sheffield region of England using world-first processes and will spearhead the brand's electrified future.

McLaren Automotive also chooses to partner with like-minded, world-leading companies and organisations who push the boundaries in their respective fields. These include Ashurst, Bowers & Wilkins, Gulf, InfiniteWorld, Pirelli, Richard Mille, Plan International and Tumi.

**About McLaren Group:**

The McLaren Group is a global leader in luxury automotive and elite motorsports with a focus on its Automotive supercar and Racing businesses.

Founded in 1963 by racer, engineer and entrepreneur Bruce McLaren, the Group is formed of McLaren Automotive, which hand-builds lightweight supercars; and a majority stake in McLaren Racing which competes in the Formula 1 World Championship and INDYCAR in the US.

The Group is globally headquartered at the iconic McLaren Technology Centre in Woking, Surrey, England.

With a reputation for innovation and technological excellence, McLaren is one of the UK's largest independent companies.

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