

# The 2009 Model Year Lotus Exige Cup 260: Add Lightness to Increase Performance

Extensive use of carbon fibre and lightweight components for the latest homologated-for-the-road Lotus Exige Cup 260

Lotus Cars Ltd, has unveiled the MY2009 Exige Cup 260. A direct development of the 2008 Exige Cup Car, this year's car uses advanced light weight components and carbon fibre body material, to reduce the overall weight by 38 kg to a total mass less than 900 kg. Maximum power output of 257 hp (260 PS), remains the same as the 2008 car, but with careful attention to weight reduction detail, the 2009 Model Year Exige Cup 260 provides a more agile and dynamic track focused drive and is more than capable of taming Europe's most challenging race circuits.

Unusually for such a focused track and road machine, the 2009 Model Year Exige Cup 260 is fully homologated for road use in Europe and key markets in Asia - a must have for many race competition programmes where a road legal car has to be entered. The Lotus Exige Cup 260 is also eligible to compete in the newly announced 2009 Lotus Cup Europe race series organized and run by LoTRDC.

The Exige Cup 260 exploits the Lotus philosophy of using weight reduction to increase performance and reduce emissions.

Mike Kimberley, Chief Executive of Group Lotus commented, "Lotus is now recognised globally as one of the leaders in the green automotive revolution. Colin Chapman, the founder of Lotus is attributed as saying "Adding power makes you faster on the straights; adding lightness makes you faster everywhere" and this statement is more relevant today than it ever has been, as decreasing weight increases the car's performance and most importantly efficiency."

The Exige Cup 260 follows this philosophy closely - the weight saving programme has looked at all areas of the car where components can be replaced with a lighter version (without pushing the costs beyond the reach of the serious track day driver

# News release



or clubman racer) or where components can be removed completely without detracting from the purity of the driving experience:

Carbon fibre (resulting in a weight saving of 12kg):-

- Roof Panel
- FIA and HANS compliant Driver and Passenger Seats\*
- One piece Carbon Fibre Dash Top Panel
- Rear Tailgate
- Front Access Panels
- Front Splitter
- Side air intake ducts
- Rear Spoiler

Lightweight components (resulting in a further weight saving of 22kg):-

- Lightweight 'Motorsport' Battery
- Ultra-light 12 Spoke Forged Alloy Wheels
- Revised Rear Engine Subframe with lightweight Coating
- Lightweight Fly Wheel
- Lightweight composite bulkhead panel replaces rear window
- Alloy Supercharger U bend pipes
- Footwell Pads

Removing some other non essential components and equipment such as the interior and boot carpets, front mudflaps, battery cover, interior mirror, sunvisors, rear tailgate gas strut, results in a further weight saving of 4kg.

However, should a customer wish, air conditioning and an interior noise reduction pack are available, together with the complete range of Lotus metallic, lifestyle and premium paint colours.

The MY2009 Exige Cup 260 weighs in at just 890 kg, giving an impressive power to weight ratio of 288 hp / tonne (291 PS / tonne). But, of course, power to weight alone does not make a highly competitive race or track car, so in addition, the Exige Cup 260 has a formidable list of standard performance focused equipment, as follows:-

# Wheels and Tyres

Ultra lightweight wheels, that reduce the unsprung mass and contribute a weight saving of approximately 10 kg (22 lbs) over the already super light forged Exige wheels, are shod with Lotus specific LTS construction and compound Yokohama

A048 LTS tyres to maximise grip and achieve the ride and handling targets set by Lotus Engineering.

# **Safety Equipment**

Lotus Exige Cup 260 cars have the safety equipment expected of a race car, with FIA and HANS compliant carbon fibre lightweight sports seats\*, normal 3-point "Webb Lock" harnesses (four or six point driver and passenger seat belt harnesses are available for track use only).

(\* The seats are FIA compliant when fitted in conjunction with fixed seat runners that are available as a track only dealer fit option).

A high tensile steel roll over hoop is now fitted with a body coloured Lotus Sport A-Frame as standard and the chassis is already pre-drilled to fit a full front roll cage – a simple dealer fit process involving just the removal of the roof panel for access prior to fitting. Completing the additional safety equipment is a FIA compliant electronic ignition kill switch, with cockpit and external activation, and a FIA compliant plumbed electrically activated fire extinguisher system, again with cockpit and external switches.

Like all current Lotus cars, the Exige Cup 260 is built around a very strong extruded and bonded aluminium chassis tub. Attached to the chassis is a sacrificial energy absorbing composite front structure designed to help absorb crash energy in the event of impact.

# Suspension

Eibach springs, one way adjustable Bilstein dampers and a stiffened and adjustable front anti-roll bar allows customers to tailor the handling characteristics of the car to their own requirements.

As the Exige Cup 260 cars are equipped for track use, a double shear track control arm brace is provided to cope with the expected kerb abuse during racing or hard track day driving.



# **Brakes**

The brake system includes large diameter 308 mm 2-piece aluminium belled cast iron cross-drilled and ventilated front discs and 282 mm cross-drilled and ventilated discs at the rear, upgraded Pagid RS14 sports brake pads set into the brake calipers (AP Racing two piece radially mounted, 4 piston at the front and Brembo sliding at the rear), and stainless steel braided brake hoses - all linked to the proven Lotus track tuned servo-assisted four-channel ABS system that enhances braking performance and minimizes stopping distance without taking over from the skill of the driver.

# Performance, Economy and Emissions

The Exige Cup 260 is one of the quickest road cars around a circuit. Key to this incredible performance is the aerodynamic package, which produces over 40 kg of downforce at 160 kmh increasing grip and stability at higher speeds. With a top speed of circa 245 kmh (152 mph) and a zero to 160 kmh (100 mph) in circa 9.9 seconds, 0 to 100 kmh in circa 4.1 seconds (0 to 60 mph in circa 4 seconds), the MY2009 Exige Cup 260 is the perfect partner for the serious racer. Combined Fuel Consumption is 9.1 l/100km and the CO2 emissions 216 g/km.

# **Engine**

The supercharged and intercooled engine in the Exige Cup 260 has a maximum power output of 260 PS (257 hp) at 8000 rpm and a torque figure of 236 Nm (174 lbft) at 6000 rpm. This significant amount of extra power and torque now available together with the VVTL-i variable cam system ensures that there is a smooth and linear delivery of power from low engine speeds all the way to the maximum 8000 rpm (8500 rpm transient for 2 seconds). The Roots-type Eaton M62 supercharger (with a sealed-for-life internal mechanism meaning that it does not require the use of the engine's oil) is run from the crankshaft and has an integral bypass valve for part load operation. Charge air (air under pressure from the supercharger) is cooled through an air-to-air intercooler (the air enters via the enhanced roof scoop) before being fed into the engine itself. All charge air ducting has been kept as short as possible with large diameter pipes to minimise restriction and maximise



throttle response and efficiency. Four high capacity injectors and an uprated fuel pump add additional fuel under hard acceleration or continuous high speed driving.

A lightweight flywheel is fitted (giving even greater flexibility and response to the gear change), a sports-type clutch plate and heavy duty clutch cover transfer the engine power and torque to the lightweight C64 six-speed gearbox (with an aluminium casing) — with the same perfectly spaced ratios as the Exige S. A torque-sensing limited slip differential is fitted as standard, with a plate type limited slip differential available as an option. An Accusump (engine oil accumulator unit) is included in the whole package as an oil reservoir back-up for extreme track use ensuring that, under those conditions, the engine oil pressure remains constant.

Electrical supply is provided by a lightweight motorsport battery which saves a massive 5 kg of weight sitting behind the rear axle – again weight saving is not just the removal of mass but ensuring that this mass is removed where it most effects performance and handling.

# **Lotus Launch Control and Lotus Traction Control**

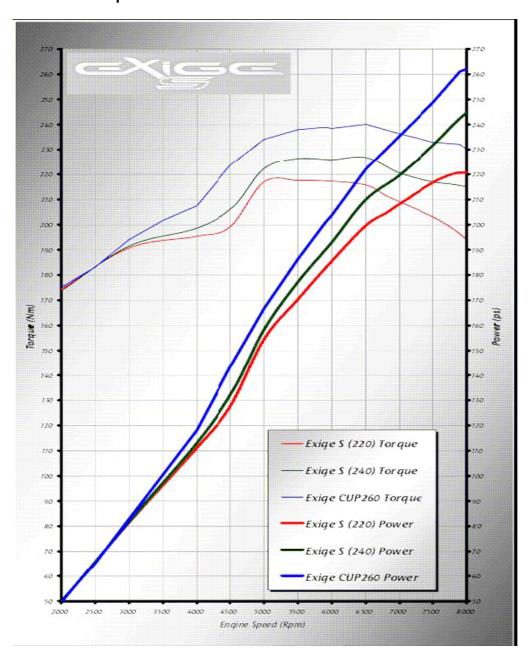
Keen to pass on lessons learned on the track with the Exige GT3 racing programme, Lotus Sport has contributed another important technology – launch control combined with variable traction control. This combination has already made its production debut with the track-oriented Lotus 2-Eleven.

The launch control allows the driver to determine the number of revs they wish to use during a standing start. Having programmed that limit, the driver then holds their foot down fully on the throttle pedal and sidesteps the clutch pedal for a very quick departure from the line. The clutch damper cushions the severity of the clutch to transmission engagement to minimise the stresses to the drivetrain. The launch control also keeps wheel-spin at bay until 6 mph, after which the traction control assumes its duties.

As with launch control, the driver can control the amount of traction control you require from the driver's seat, altering it on the move to suit the characteristics of particular corners. The amount of traction control can be varied in over 30 increments from an optimum 7 percent tyre slip to completely off. The message

display in the new instrument pack displays what degree of traction control you have currently dialled in.

# Power and torque curves





# **Roof Scoop**

For 2009, the Lotus Sport Exige Cup 260 now has a high flow, full-length carbon roof scoop as part of the lightweight carbon roof panel, which not only saves 4 kg but also ensures efficient cooling through the intercooler, which in turn allows the Exige Cup 260 to gain a higher charge density in the cylinders.

# **Specification**

The standard specification Lotus Exige Cup 260 is road legal within the European Union, and can be registered for road use.

The Exige Cup 260 is available now for sale in mainland Europe. Individual recommended retail prices for some major European markets are listed below:

# Retail prices for the UK (MSRP)

Recommended retail price (including VAT) is £45,995, (an additional £950 is charged for on the road costs. These include delivery, PDI, first service, number plates, first registration fee, valet, 12 months Road Fund Licence and a full tank of fuel.

Recommended retail prices for the following markets (MSRP) (including transport, delivery, local taxes and first service (but **excluding** registration, license plates and or a full tank of fuel):

Belgium € 68,650France € 67,950Germany € 67,600Italy € 68,650Netherlands € 91,800Switzerland CHF 100,000



Recommended retail prices for the following markets (MSRP) (excluding transport, delivery, local taxes, first service, registration, license plates and full tank of fuel):

 Luxembourg
 €56,034

 Spain
 €56,034

 Austria
 €56,034

 Greece
 €56,034

For recommended retail prices for the following markets (MSRP): Cyprus, Denmark, Estonia, Russia, Sweden please contact a member of the PR Team.

# Warranty

The Lotus Exige Cup 260 will have a limited manufacturer's warranty unless used for competition or timed runs. Any type of timed or competitive vehicle use requires that a suitably qualified specialist applies expert levels of vehicle preparation, servicing and maintenance. The purchaser's statutory rights are not affected.

Notes to Editors

# **Pictures**

High resolution pictures of the Lotus Exige Cup 260 are available for download at the Group Lotus media centre website (registered users only): http://www.grouplotus.com/mediacentre

# **Lotus Cup Europe:**

Lotus Cup Europe has a new organiser and follows a new format with a six round, twelve race calendar for the 2009 season.

The series will be organised and run by LoTRDC Ltd. who, with MSVR runs the successful "Elise Trophy" series in the UK. LoTRDC is an independent company which is not connected to Lotus. The Proposed Calendar will have drivers racing on some of the most prestigious and demanding circuits in Europe:-

The provisional calendar is as follows:

- Donington Park (UK)
- Le Mans (France) or Zolder (Belgium)
- Zandvoort (Holland)
- Brands Hatch Grand Prix (UK)
- Dijon-Prenois (France)
- Spa Francorchamps (Belgium)



The calendar and race regulations for Lotus Cup Europe will be finalised by November; it is expected that there will be three classes available to ensure that the majority of Lotus owners across Europe can compete. The 2-Eleven and the new 2009 Model year Lotus Exige Cup 260 will also be eligible.

For 2009, Lotus Cup Europe will have a different format from the past race series, as follows:-

20 minutes qualifying

Race 1 (minimum 20 minutes duration)

Race 2 (minimum 20 minutes duration)

The grid will consist of Lotus product only and all cars will run on Yokohama A048 LTS tyres.

Further details are available at: www.LotusCupEurope.com

# **About Lotus**

The main operating subsidiary of Group Lotus plc is Lotus Cars Ltd, which has two operating divisions - Lotus Engineering and Lotus Cars. Lotus Engineering is an internationally recognised automotive engineering consultancy based in Norfolk, UK. Global facilities include those in Michigan (USA), Kuala Lumpur (Malaysia), China and offices in Germany and Japan.

Lotus Engineering provides comprehensive and versatile consultancy services to many of the world's OEMs and Tier 1 suppliers, offering a full engineering service from initial concept and project design through development and integration of the complete vehicle to meet all worldwide markets and customers to full production. This includes third party 'niche vehicle' engineering and manufacture worldwide.

Lotus Cars builds world class, prestige, high performance sports cars for sale in 37 countries. These include the iconic Lotus Elise, and the Exige and Europa. Lotus is a global high-tech company, expanding rapidly and committed to driving forward technology for both Lotus Cars and its Engineering clients, spearheading research into such areas as hybrids, electric vehicles and renewable fuels.

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