



1

17 August 2005

## **NEWS RELEASE**

Page 1 of 4

# "Circuit Car" will run for first time at Shelsley Walsh Centenary event

# **Lotus "Circuit Car" – Prototype Specifiations and Pictures:**

The prototype Lotus "Circuit Car" will run for the first time at the oldest motorsport venue in the world, the Shelsley Walsh Hill Climb, during the Centenary celebrations.

Based on the strong, stiff and lightweight aluminium chassis first seen on the Lotus Elise, and weighing in at around 650 kg, the single-seater car (with an option of two seats) has been designed and engineered solely for Track Days and Club Racing. The prototype car was designed and built in an incredible eleven weeks and production versions are scheduled to be built from mid 2006 in the world class production facilities at the Lotus headquarters in Hethel Norfolk.

# X

## The Following Information Describes the Prototype Lotus "Circuit Car"

The visually dramatic open-topped prototype "Circuit Car" has lightweight composite bodywork and a very powerful supercharged and intercooled 1.8 litre engine.

The innovative and technologically advanced extruded and bonded aluminium chassis has high side sills that reduce the complexity of the chassis structure.

The engine with VVTL-i (Variable Valve Timing and Lift – intelligent) is mated to a Roots-type Eaton M62 supercharger with air-to-air intercooler to give a maximum power output of 243 hp (181 kW) at 8000 rpm and a maximum torque of 174 lb ft (236 Nm) at 7000 rpm. On production versions, an entry-level naturally-aspirated VVTL-i engine will also be available with 190 hp (141 kW) at 8000 rpm and 138 lbft (181 Nm) at 7000 rpm. Engine management control is provided by the bespoke - mapped Lotus T4 system and a drive-by-wire electronic throttle.

The 6-speed C64 close ratio gearbox is linked to an open slip differential and a prototype traction control system perfect for the tight and twisty Shelsley Walsh Hill Climb course.

The power to weight ratio, of course a key Lotus engineering principle and core brand value, for the supercharged engine is around 373 hp/tonne (278 kW/tonne) with a torque to weight ratio of 267 lbft per tonne (363 Nm/tonne). It is estimated to achieve the 0-100 mph (160 km/h) sprint in less than 9.0 seconds. This exciting combination has allowed for a dynamic racing package producing higher performance to that of existing Elise-based products, powering the car from 0-62 mph (0-100 km/h) in under 4 seconds.

Braking is provided by a servo-assisted, track tuned 4-channel Antilock Braking System (ABS) with Lotus/AP-Racing twin-piston fixed aluminium alloy front brake calipers, Brembo single-piston sliding rear calipers and 282 mm diameter, 26 mm thick front and rear, cast-iron ventilated & cross-drilled discs.

The lightweight GRP composite bodywork is bolted to the chassis for easy removal for maintenance and race / track preparation. The bodywork has been designed by the Lotus Design team led by Russell Carr, Chief of Design for Lotus. Russell Carr, explains the design philosophy of the new Lotus "Circuit Car": "The design captures the essence of the other Lotus based







1

17 August 2005

## **NEWS RELEASE**

Page 2 of 4

products and combines it with a functionally correct bodywork to give a racecar that is not only beautiful to look at but aerodynamically and structurally as effective as it possibly can be,"

The small frontal area with no windscreen is combined with flat, unsculptured sides with no airintakes, for minimal drag; and a deep front splitter and a large rear wing (single plane as standard and dual element as an option) and a rear diffuser to attain maximum aerodynamic downforce.

For the Shelsley Walsh Event, the "Circuit Car" uses Lotus Sport 5 spoke forged wheels, which are shod with Yokohama A005 Hill Climb specification racing slicks (Yokohama A006 racing wet tyres are an option). For production versions, other tyre options will also be available.

Suspension and damping is provided by fully independent unequal length wishbones, Eibach coil springs, Ohlins 2-way adjustable dampers and an adjustable front anti-roll bar.

Tony Shute, Head of Product Development at Lotus Cars will be driving the Lotus "Circuit Car" for its premier at the Shelsley Walsh Centenary celebrations. Tony explains what makes the Lotus "Circuit Car" a leading high performance track car:

"This new product has allowed Lotus to once again apply its key "performance through lightweight" philosophy. This is in order to achieve an innovative product for the track day and club racing Lotus enthusiast whilst staying true to the key design attributes of the Elise and Exige products. They are considered to be amongst the finest existing road and track day cars by thousands of owners around the world, and the "Circuit Car" will build on this formidable reputation, helping to further underline Lotus as the ultimate driver's choice."

The Lotus "Circuit Car" is scheduled to go on sale by mid 2006 with volumes of approximately 100 units per year.

The name of the "Circuit Car" and the Manufacturer's Suggested Retail Prices will not be confirmed until closer to production but it is expected that the production versions of the Lotus "Circuit Car" will start at around £25,000 for the 190 hp version in the UK. Prices in other markets will be release over the next few months.

Ends

## **Technical Specifications of Prototype Lotus Circuit Car**

#### **Engine**

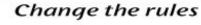
Supercharged - 240:

- 2ZZ-GE Supercharged engine, developed by Lotus Engineering
- Capacity: 1,796 cm<sup>3</sup>
- Max Power 243 hp (181 kW) @ 8000 rpm (DIN 70020)
- Max Torque: 174 lb ft (236 Nm) @ 7000 rpm (DIN 70020)

Option - 190:

- 2ZZ-GE, 4 cylinder, dohc 4 valves per cylinder with variable valve timing and lift
- Capacity: 1,796 cm<sup>3</sup>
- Max power: 190 hp (141 kW) @ 7800 rpm (DIN 70020) Integral ducts to provide engine air feed and cooling
- Max Torque: 138 lb ft (181 Nm) @ 6800 rpm (DIN 70020)











17 August 2005

## **NEWS RELEASE**

Page 3 of 4

#### **Transmission**

- C64 Gearbox, all aluminium lightweight construction
- 6-speed
- Close ratio
- · Constant mesh helical gears
- Open differential
- Limited Slip differential (optional)

#### Chassis

• Lotus designed lightweight structure of epoxy bonded aluminium alloy extrusions and lightweight steel rear subframe

## **Bodywork**

- · Lightweight composite body shell
- Bolt on exterior body panels for ease of service and repair
- Integral ducts to provide engine air feed and cooling

## Aerodynamics

- Flat bottom with front aero splitter and rear diffuser
- Aerodynamically designed body shape with minimal drag and frontal area
- Single plane rear wing, high downforce, carbon composite, dual element rear wing (optional)

#### Suspension

- Fully independent suspension utilising unequal length wishbones
- Coaxial mono-tube gas damper
- Eibach coil springs at each corner
- Front anti roll-bar
- Bilstein dampers
- Ohlins 2-way adjustable dampers (optional)

#### **Braking System**

- F&R Cross drilled disc brakes
- AP racing front brake calipers
- Brembo rear brake calipers
- ABS

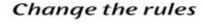
#### Wheels

- 8 x Y spoke Cast wheels
- 7 Twin spoke Lightweight Forged Wheels (optional)
- Lotus Sport 5-spoke Lightweight Forged Wheels (optional)

#### **Tyres**

- Yokohama Advan AO48
- Yokohama A006 racing wet tyres (optional)
- Yokohama A005 racing slick tyres (optional) Passenger seat and safety equipment
- Yokohama A005 racing slick tyres Hillclimb Spec (optional)









1

17 August 2005

## **NEWS RELEASE**

Page 4 of 4

## **Electrical System**

- Lotus T4 engine management system with Drive-by-wire throttle control
- Lightweight dry cell battery

#### Interior

- Nardi Steering Wheel
- Single Sports Seat
- Passenger seat and harness (optional)
- 6-point harnesses (optional)

#### Options

A variety of options will be available including:

#### **SPORTS PACK:**

• Optional dynamics improvement package

#### TRACK PACK:

Passenger seat and safety equipment

#### **SVA PACK:**

• Offering parts required to convert the Lotus Circuit Car to meet UK Single Vehicle Approval.

#### **RACE PACKS**

• Options packages to tailor the car for entry into race series of the FIA and MSA regulations.

## **STANDALONE OPTIONS**

A variety of options to tailor your vehicle to you, including:

- Limited Slip differential
- Traction control
- Race exhaust (105db)
- Racing tyres and wheel options
- Protective cover

### Notes:

The Shelsley Walsh Centenary Festival Meeting will run from **Friday 19**<sup>th</sup> to **Sunday 21**<sup>st</sup> **August**, with the Lotus "Circuit Car" turning out for practice on the Friday ahead of its racing debut on the Sunday. Tony Shute, Head of Product Development at Lotus Cars, will be in the driving seat.

High-resolution pictures of the Lotus "Circuit Car" can be downloaded from the media centre of the official Group Lotus website at <a href="http://www.grouplotus.com/mediactr">http://www.grouplotus.com/mediactr</a>. The image library is for registered users only. Members of the press may register for the media centre.

For further information about the Shelsley Walsh Centenary Festival Meeting please visit <a href="www.shelsley-walsh.co.uk">www.shelsley-walsh.co.uk</a>

For further details please contact:

PR Department

Group Lotus plc, Potash Lane, Hethel, Norfolk, UK, NR14 8EZ

Tel: +44(0)1953 608264 Fax: +44(0)1953 608111 Email: pr@lotuscars.co.uk



