



DATE: April 22, 2012
SUBJECT: All New Powertrains Introduction

To all Jaguar retailers:

Today at the Beijing Auto Show Jaguar has announced the launch of two new engines - a Supercharged 3.0-liter V6 and a Turbocharged 2.0-liter I4 - that will support the expansion of the brand. Further details on US applications and specifications of the new engine portfolio will be released as part of the 13MY product announcements that will be issued closer to Job#1 for each model. Pricing and equipment levels will also be provided at that time.

A copy of the press release is attached below. You can find images of the new engines and additional reveal information from the Beijing show on the Jaguar interactive web site:

www.interactivejaguar.com



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Contact:

Wayne York Kung
Product Communications Manager
Jaguar Land Rover North America,
LLC
201.760.8591
wkung@jaguarlandrover.com

Leah Watkins-Hall
Corporate, Brand & Interactive
Communications Manager Jaguar
Land Rover North America, LLC
201.760.8578
lwatki40@jaguarlandrover.com

JAGUAR ANNOUNCES FUTURE POWERTRAINS

AT-A-GLANCE

- Jaguar will bring to market globally two new forced-induction engines; a Supercharged 3.0L V6, and a Turbocharged 2.0L in-line four cylinder
- These engines will be offered as choices on a number of Jaguar models in the future
- The Supercharged 3.0L V6 draws on key technology used in the Jaguar 5-liter V8. This engine will be available in two states of tune: 380hp and 340hp
- The Turbocharged 2.0L I-4 produces 240hp
- The 380hp version of the Supercharged 3.0L V6 will be exclusively offered as one of the powerplants in the forthcoming Jaguar F-TYPE roadster
- Both engines will deliver their power through eight-speed automatic transmissions
- The V6 will be available with Jaguar's Intelligent Stop-Start system

Introduction

As Jaguar expands its product offerings in key global markets, it is introducing two additional engines; a new Supercharged 3.0-liter V6, and a Turbocharged 2.0-liter I4, which will be offered as choices on a number of models.

The first announced utilization of the 380hp Supercharged 3.0L V6 will be the all-new Jaguar F-TYPE two seat roadster, coming in 2013. The Jaguar F-TYPE will focus uncompromisingly on delivering a rewarding drive experience

Adrian Hallmark, Global Brand Director, Jaguar Cars, said, "Jaguar currently has its strongest range of products for several decades. Our continued growth is dependent on two things; activating the awareness of the brand, and expanding our range to enable us to access new customers in both existing and emerging markets. The introduction of these two additional forced-induction engines is integral to this ambitious plan."

The new V6 engine has been developed by Jaguar from its existing 5-liter V8. This all aluminum alloy engine has received accolades from around the world in applications from luxury sedans to 186MPH convertibles. The V6 uses many key technologies from the V8 engine including direct injection, variable valve timing and aluminum construction. It will offer comparable levels of power and refinement to the naturally-aspirated version of the V8 engine, but with greater specific output and efficiency courtesy of supercharging.

The Turbocharged 2.0-liter I4 engine uses a range of technologies for power generation that belies its size. It produces 240hp thanks to the use of three key innovations; low-inertia turbocharging, direct fuel-injection and variable timing of both the intake and exhaust camshafts.

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Go to <http://media.jaguar.com> or <http://interactivejaguar.com> for news releases, high-resolution photographs and broadcast quality video footage.

Information about Jaguar North America products is available to consumers via the Internet at www.jaguarusa.com.

Ron Lee, Group Chief Engineer Powertrain, Jaguar Cars, said: "Both these new engines make intelligent use of forced-induction technology to produce high-specific output in an efficient way, while delivering the compelling combination of flexibility, refinement and driver reward that are integral attributes in all Jaguar engines."

Both engines will be mated to a new eight-speed automatic gearbox which offers a broad spread of ratios for an optimally balanced combination of performance, economy, and driver control. The 3.0 V6 S/C will also be available with Jaguar's Intelligent Stop-Start system.

Details: Supercharged 3.0-liter V6

This new engine finds its bloodline from the current Jaguar V8 engine. The all-aluminum architecture of the V8 forms the basis of Jaguar's new supercharged V6. The engine will be presented in two states of tune depending on its application; the 380hp version and a 340hp version.

The new quad-cam V6 shares its all-aluminum construction with the V8, with the lightweight die-cast block supplemented with cross-bolted main bearing caps to increase rigidity and therefore refinement. The valves themselves are subject to control by a dual independent variable cam timing (DIVCT) system which is activated by the positive and negative torques generated by the movement of the intake and exhaust valves. This variable timing system features actuation rates of more than 150 degrees per second throughout the rev range, to optimize power, torque and economy at all engine speeds.

This responsive and uninterrupted power delivery is made possible through the use of spray-guided direct injection (SGDI) which delivers precisely measured quantities of fuel directly into the center of the combustion chambers at pressures of up to 300 bar (2,176 PSI). The fuel is delivered several times during each combustion cycle, creating a more homogenous air-fuel mixture for cleaner and more efficient combustion.

To maximize combustion efficiency, these spark plugs are precisely oriented both in relation to the injector and within the combustion chamber. The compression ratio is also raised from 9.5:1 in the supercharged V8 to 10.5:1 in the supercharged V6, further improving fuel economy and reducing emissions.

Mounted in the 'V' of the engine is latest-generation Roots-type twin vortex supercharger, which is the key to achieving high-specific output and efficiency. A water-cooled intercooler reduces the temperature of the intake air to optimize power and efficiency. The supercharger boost control is electronically managed by new Bosch engine management software. The engine features a system of counter-rotating front and rear balancer weights which lend it the same smoothness and refinement characteristics as its larger V8 brother.

The V6 powertrain will be completed by a Jaguar-tuned ZF eight-speed automatic transmission. This transmission's large spread of ratios allows the engine's prodigious power to be fully exploited while optimizing economy and emissions.

Efficiency is also boosted by an Intelligent Stop-Start system which improves fuel consumption by up to seven per cent in European Test Cycle.* Utilizing a twin solenoid starter, the system is able to restart the engine in less time than it takes for the driver's foot to move from the brake to the accelerator. In engine stop-start 'change of mind' scenarios, it is able to reenergize the engine via rapidly reintroducing fuel into the cylinders.

Details: Turbocharged 2.0-liter I4

The introduction of the Turbocharged I4 to the Jaguar range brings greatly improved efficiency* with competitive power outputs. This new engine will be used in a longitudinal configuration and mated to the new ZF eight-speed automatic transmission that will be used on the V6. Again, this transmission's large spread of ratios maximizes both performance and efficiency. Producing 240hp at 5,500 rpm, this engine offers a highly flexible powerband.

With a weight of only 304 lbs (138kg), courtesy of compact dimensions and all-aluminum construction, it is the lightest engine ever fitted into a production Jaguar. This low mass improves dynamic agility while bringing further emissions and economy benefits.

The engine uses of a low-inertia turbocharger that enables it to produce its high-specific power and torque outputs. The turbocharger is fed via a lightweight thin-walled exhaust manifold which offers a shorter engine warm-up period and faster catalyst light-off. Chain-driven cams operate with variable timing on both the intake and exhaust valves to maximize the broad spread of torque.

The engine features specialized coatings on the piston rings and tappets in order to reduce unwanted internal friction. Efficiency and power gains are also realized using direct injection technology. Fuel is injected in precisely measured doses several times during each combustion cycle to ensure the most efficient possible burn with the maximum benefit in terms of power generation while maintaining the lowest possible fuel consumption and emissions.

Significant steps have been taken to ensure expected levels of smoothness and sophistication refinement including twin balancer shafts, active engine mounts, an acoustic engine cover, and the use of additional sound insulation.

TECHNICAL SPECIFICATIONS**

340hp Supercharged 3.0-liter V6
Engine type: V6, supercharged
Capacity (cc): 2,995
Bore/stroke (mm): 84.5/89
Peak power (HP@rpm): 340@6,500

380hp Supercharged 3.0-liter V6
Engine type: V6, supercharged
Capacity (cc): 2,995
Bore/stroke (mm): 84.5/89
Peak power (HP@rpm): 380@6,500

240hp Turbocharged 2.0-liter I4
Engine type: four-cylinder, in-line, turbocharged
Capacity (cc): 1999
Bore/stroke (mm): 87.5/83.1
Peak power (HP@rpm): 240@5500

**All figures estimated. EPA estimated ratings pending.*

***Manufacturer's estimates. All figures correct at time of going to press. Figures will not be final at time of printing— they will be "target figures" subject to final confirmation.*

Editor's notes

- The 3.0 V6 S/C and 2.0 Turbocharged I4 will join Jaguar's existing 5.0 liter V8 engines
- Full emissions and fuel economy data will follow upon final testing and certification

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About Jaguar

Jaguar Cars Limited is a premier manufacturer of luxury sedans and sports cars offering unparalleled design with tremendous performance. The company's vision throughout its storied history has been simple: To produce beautiful, fast cars that are desired the world over. Jaguar strives to provide a world class ownership experience to every owner. Today's Jaguar lineup consists of the XJ luxury sedan, XF sports sedan and the XK coupe and convertible sports cars. Jaguar designs, engineers and manufactures exclusively in the United Kingdom, at the Castle Bromwich

manufacturing plant in the British Midlands. Jaguar is fully engaged with sustainability initiatives and social concerns with continuous involvement in environmental and community programs.

About Jaguar Land Rover North America, LLC

Jaguar Land Rover is a business built around two great British car brands that are designed, engineered and manufactured in the United Kingdom. Jaguar Cars Limited, founded in 1922, is one of the world's premier manufacturers of luxury sedans and sports cars. Since 1948, Land Rover has been manufacturing authentic 4x4s that define "breadth of capability" in their segments.

Jaguar manufactures all their cars exclusively in the United Kingdom, at the Castle Bromwich manufacturing plant in the British Midlands. Land Rover and Range Rover models are built in the United Kingdom at the Solihull and Halewood plants. Land Rover exports to 169 countries and Jaguar exports to 63 countries, with global sales for both brands exceeding 240,000 vehicles annually. The Jaguar Land Rover business employs 16,000 people in United Kingdom, including 3,500 engineers at two product development centers.

Headquartered in Mahwah, New Jersey in the United States, Jaguar Land Rover North America, LLC has offices across the USA and Canada and is represented by more than 330 retail outlets.