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## **All-new Pentastar V-6 Engine from Chrysler Group LLC Improves Powertrain Flexibility and Fuel Efficiency**

- The all-new flex-fuel Pentastar V-6 engine is the most advanced six-cylinder engine in the history of Chrysler Group Powertrain
- All-new 3.6-liter Pentastar V-6 to replace seven current V-6 engines, resulting in flexibility, efficient operations and significant cost savings to the company
- Engine contributes to company's overall fuel-efficiency improvement of more than 25 percent by 2014
- Future applications of Pentastar V-6 will incorporate Multiair, direct-injection and turbocharging
- 2011 Jeep® Grand Cherokee is the first vehicle to offer Pentastar

March 18, 2010, Auburn Hills, Mich. - Chrysler Group LLC introduces the most advanced V-6 engine in the company's history-the Pentastar V-6. This new line of V-6 engines will contribute to an overall fuel-efficiency improvement across the Chrysler, Ram Truck, Jeep® and Dodge product lineup. More refined and fuel-efficient, the Pentastar engine will ultimately replace seven current Chrysler Group V-6 engines and utilize advanced technologies from the Fiat alliance such as Multiair, direct-injection and turbocharging.

"First offered in the all-new 2011 Jeep Grand Cherokee, launching this year, our all-new Pentastar V-6 engine allows increased flexibility to apply new technologies and enables significant cost savings for the company by substituting previous generation V-6 engines," said Paolo Ferrero, Senior Vice President-Powertrain, Chrysler Group LLC. "By 2014, the new V-6 will account for more than a third of our total engine output and contribute to an overall fuel economy improvement of more than 25 percent."

In the all-new 2011 Jeep Grand Cherokee, the all-new 3.6-liter Pentastar V-6 engine will deliver 290 horsepower (216 kW) at 6,350 rpm and 260 lb.-ft. (353 N•m) of torque at 4,300 rpm-an increase of 38 percent in horsepower and 11 percent in torque over its predecessor-while providing an 11 percent fuel economy improvement.

### **Customers Benefit: Fuel Efficiency, Refinement, Quality, Low Cost of Ownership**

Chrysler Group Powertrain engineers benchmarked the industry's leading engines to set functional targets. The result is an all-new engine with an ideal integration of select technologies that deliver exceptional refinement, fuel efficiency and performance.

Chrysler Group's all-new 3.6-liter Pentastar V-6 engine offers double-overhead camshafts (DOHC) and a high-pressure die-cast aluminum cylinder block in a 60-degree configuration. Additional features include a narrow-included valve angle, cylinder head and high-flow intake and exhaust ports. This design, combined with dual-independent-cam phasing, allows optimum volumetric and combustion efficiency over the full speed and load range, resulting in an exceptionally flat torque curve along with high specific power-the engine's torque exceeds 90 percent of its peak value from 1,800 to 6,350 rpm, providing customers with outstanding driveability and responsiveness, without the need for premium fuel.

"Our engineers synthesized the best combination of design features and technologies to create a V-6 engine that will exceed customer needs," said Bob Lee, Vice President-Engine and Electrified Propulsion Systems Engineering, Chrysler Group LLC. "The elegantly simple design maximizes functionality and provides class-leading levels of refinement, fuel-efficiency, performance and cost of ownership."

The advanced oil-filter system eliminates oil spills and contains an incinerable filter element for more efficient disposal than typical oil filters. The use of long-life spark plugs and a high-energy coil-on-plug ignition system also helps to reduce maintenance costs.

The Pentastar V-6 is designed to run on regular gasoline, offering a 10 percent reduction in fuel cost compared with premium fueled engines. The engine also is flex-fuel capable, offering consumers the choice of gasoline or E85 fuel.

#### **All-new Chrysler 3.6-liter, DOHC, 24-valve Pentastar V-6 Technical Specifications**

Displacement: 3.6 liters

Bore x stroke: 96 x 83 mm

Valve train system: Double-overhead cam with roller finger followers and hydraulic lash adjusters. Dual independent cam-torque actuated phasers

Fuel injection: Multi-point port fuel injection

Construction: High-pressure die-cast aluminum cylinder block and semi-permanent mold aluminum cylinder head

Maximum engine speed: 7200 rpm

Fuel requirement: E85 (Ethanol) or unleaded regular, 87 octane (R+M)/2

Emission capability: PZEV

#### **About Chrysler Group LLC**

Headquartered in Auburn Hills, Mich., Chrysler Group LLC's product lineup features some of the world's most recognizable vehicles, including the Chrysler 300, Jeep Wrangler and Ram Truck. Fiat will contribute world-class technology, platforms and powertrains for small- and medium-sized cars, allowing Chrysler Group to offer an expanded product line including environmentally friendly vehicles.

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