

BORGWARNER PROVIDES INNOVATIVE FRICTION TECHNOLOGY FOR ZF'S AUTOMATIC HYBRID TRANSMISSIONS

BorgWarner's Advanced Friction Plates and Materials
Increase Performance and Shift Comfort for Hybrid Transmissions,
Enabling Smooth Shifting from Electric Motor to Combustion Engine

Auburn Hills, Michigan, June 13, 2012 – BorgWarner's leading expertise in friction plate design and materials improves shift performance and efficiency for the ZF full hybrid 8-speed automatic transmission. The parallel hybrid transmission launched in the 2012 Audi Q5 Hybrid Quattro will also be featured in various other applications near term.

"BorgWarner's advanced friction technology delivers improved mechanical stress resistance and exceptional reliability," said Robin Kendrick, President and General Manager, BorgWarner Transmission Systems. "Our technology leadership in friction plate design and material together with ZF's know-how supports the development of state-of-the-art transmission technology for low-emission vehicles without sacrificing responsiveness and driving comfort. Drivers benefit from enhanced performance while optimizing fuel consumption."

BorgWarner's leading friction plate technology enables the ZF 8-speed hybrid automatic transmission to shift smoothly between the electric motor and combustion engine. The technology is employed in BorgWarner's friction plates for the wet separating clutch and the launch clutch. The separating clutch is used to engage and disengage the electric motor for both separate and simultaneous operation of the electric motor and combustion engine. An integrated launch clutch replaces the

function of a conventional torque converter and achieves similar launch performance in terms of comfort and thermal load capacity.

For both clutches, BorgWarner developed innovative groove designs and uses advanced friction materials for a stable friction coefficient and improved temperature resistance.

About BorgWarner

Auburn Hills, Michigan-based BorgWarner Inc. (NYSE: BWA) is a technology leader in highly engineered components and systems for powertrain applications worldwide. Operating manufacturing and technical facilities in 59 locations in 19 countries, the company develops products to improve fuel economy, reduce emissions and enhance performance. Customers include VW/Audi, Ford, Toyota, Renault/Nissan, General Motors, Hyundai/Kia, Daimler, Chrysler, Fiat, BMW, Honda, John Deere, PSA, and MAN. For more information, please visit www.borgwarner.com.



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