

**BORGWARNER PRODUCES**  
**MULTI-SPARK IGNITION COILS IN GERMANY**

*BorgWarner's Advanced Ignition Coil Technology Optimizes the Combustion  
Process for Powerful Gasoline Direct Injection Engines*

Auburn Hills, Michigan, July 16, 2014 – BorgWarner Emissions Systems is producing multi-spark ignition coils at its plant in Muggendorf, Germany, for Daimler's six- and eight-cylinder engines. With displacements between 3.5 and 5.5 liters and power ratings ranging from 249 to 549 HP (185 kW - 410 kW), these powerful engines are available in the Mercedes-Benz C-, E- and S-Classes. Specially designed for gasoline direct-injection (GDI) engines running stratified combustion, BorgWarner's compact multi-spark ignition coil technology enlarges the ignition zone for more controlled and optimized combustion, improved fuel economy and reduced emissions.

"BorgWarner's multi-spark ignition technology extends spark duration and provides the high ignition voltage needed to optimize engine performance for today's turbocharged direct-injection gasoline engines," said Brady Ericson, President and General Manager, BorgWarner Emissions Systems. "By increasing frequency and variability, BorgWarner's advanced ignition technology allows automakers to take advantage of high exhaust gas recirculation rates, turbocharging and stratified charge operation to improve fuel economy and emissions."

Based on a conventional 14-volt coil, BorgWarner's multi-spark ignition coil features a bidirectional interface with an electronic control unit to precisely trigger multiple discharges and recharges within one millisecond to produce spark energy multiple times at short intervals. Enlarging the ignition zone and generating multiple sparks extends the spark duration considerably to deliver optimal combustion, improved fuel economy, lower emissions, and it prevents misfires. In addition, BorgWarner's ignition technology helps

reduce emissions during cold-starts and improves engine running under nearly any operating condition.

### **About BorgWarner**

BorgWarner Inc. (NYSE: BWA) is a product leader in highly engineered components and systems for powertrains around the world. Operating manufacturing and technical facilities in 60 locations in 19 countries, the company delivers innovative powertrain solutions to improve fuel economy, reduce emissions and enhance performance. For more information, please visit [borgwarner.com](http://borgwarner.com).



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