

## GOODLOE, GRIFFITHS, MARTINELLI AND BELL WIN 2011 BORGWARNER LOUIS SCHWITZER AWARD

Refueling Safety Interlock System from Honda Performance Development
Helps Prevent Fuel Spills and Injuries during Refueling

Auburn Hills, Michigan, May 23, 2011 – The 45th annual BorgWarner Louis Schwitzer Award has been presented to engineers James Goodloe, Roger Griffiths, Marcelo Martinelli and Robert Bell from Honda Performance Development for the Honda Refueling Safety Interlock System. Designed to prevent a race car from leaving the pit lane with the refueling hose still attached, the system helps prevent fuel spills and injuries to drivers and crew members. The system is required for the 2011 IZOD IndyCar Series and Indianapolis 500.

The Honda Refueling Safety Interlock System uses LED photoelectric sensors to detect a probe at the end of the refueling hose. Once detected, the sensor sends a signal through the engine control unit to the gearbox control unit, which selects and/or holds the gearbox in neutral until the refueling hose has been removed. Only then can the driver select first gear and safely leave the pit. The software also advises the driver that the system is activated via the dashboard display. Should a sensor fail during a race, the system can be overridden, but not without detection by IndyCar officials. Designed to withstand the harsh operating environment at the IZOD IndyCar Series, the sensors have achieved 2,500 competition miles without failure.

Presented by engineers to engineers, the Louis Schwitzer Award recognizes individuals for innovation and engineering excellence in the field of race car design, specifically related to the annual Indianapolis 500. Presented by the Indiana Section of SAE International, BorgWarner sponsors the prestigious \$10,000 award. The winners are also honored at an awards banquet, and their names are immortalized on the Schwitzer trophy on permanent display at the Indianapolis Motor Speedway Hall of Fame Museum.

The award was initiated in 1967 to memorialize Louis Schwitzer, a true automotive pioneer who had close ties to the Indianapolis Motor Speedway (IMS) at its very beginning a century ago. As a professional race car driver, he was the winner of the first auto race at the IMS in 1909. As a pioneer automotive engineer, he made his mark in the design of the "Marmon Yellow Jacket" engine that powered the Marmon Wasp to win the first Indianapolis 500 in 1911.

After working in the automotive industry for many years, Louis founded the Schwitzer Corporation, which produced innovative cooling fans, water pumps and turbochargers. The Schwitzer Corporation joined BorgWarner in 1999. Throughout his career, Louis enjoyed numerous technological accomplishments, supported higher education, led the IMS technical committee for many years and maintained a strong association with SAE.

## **About BorgWarner**

Auburn Hills, Michigan-based BorgWarner Inc. (NYSE: BWA) is a product leader in highly engineered components and systems for vehicle powertrain applications worldwide. The company operates manufacturing and technical facilities in 59 locations in 19 countries. Customers include VW/Audi, Ford, Toyota, Renault/Nissan, General Motors, Hyundai/Kia, Daimler, Chrysler, Fiat, BMW, Honda, John Deere, PSA, and MAN. The Internet address for BorgWarner is: http://www.borgwarner.com.