BMW Sauber F1Team



"Technology accelerator" for series development. KERS powers Formula One into a new dimension.

Munich/Hinwil, July 14 2008. Hybrid technology in Formula One has been given the go-ahead and the development process is underway. Powered by a modified drive concept, the top category of motorsport is poised to enter a new dimension in 2009 – and deliver significant impetus for the development of standard production vehicles in the process. From the start of next season, the Formula One regulations allow for the use of hybrid technology to increase the output and efficiency of the cars. To this end, the BMW Sauber F1 Team is working flat out on the development of its KERS (Kinetic Energy Recovery System) brake energy regeneration system.

BMW Sauber F1 Team enhances the hybrid expertise of the BMW Group.

As Dr Klaus Draeger, member of the BMW AG Board of Management responsible for development, reports: "The BMW Group can transfer the knowledge gained within the BMW Sauber F1 Team directly into the development of standard production vehicles. This makes Formula One the ideal pre-development platform for innovative drive technologies. The new Formula One regulations give us the opportunity to use innovative hybrid technology under extreme conditions and in so doing to garner crucial expertise for series development as well. BMW customers stand to benefit as a result. The KERS unit designed for the BMW Sauber F1.09 is a highly effective variant of brake energy regeneration technology, and is similar in the way it works to the ActiveHybrid technology developed for BMW standard production vehicles."

BMW Sauber F1 Team develops electric KERS system.

KERS enables the regeneration and storage of braking energy, which is then put on tap as an extra source of power under acceleration to complement the output of the V8 engine. The BMW Sauber F1 Team has decided to focus its efforts on an electric solution. The BMW Sauber F1.09 will be equipped with a hybrid system consisting of a combination of electric motor and generator, the requisite power electronics and an energy storage module.

The BMW Sauber F1.09 will store enough energy under braking to provide an additional 60 kW of output over around 6.5 seconds of acceleration. The complete system will weigh under 40 kg. This means that the power density of the F1 KERS technology will be considerably greater than that of the systems currently used in standard production vehicles. The newly acquired expertise will flow straight into production car development over the years to come.

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Benjamin Titz +49 179 7438088 benjamin.titz@bmw.de "For us KERS is an extremely exciting project and a great opportunity. We are standing at the threshold between a conventional package of engine and independent transmission and an integrated drive system," explains BMW Motorsport Director Mario Theissen: "The power density of the KERS components will far exceed that of today's hybrid vehicles. KERS will see Formula One take on



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a pioneering role for series production technologies going forward. F1 will give a baptism of fire to innovative concepts whose service life and reliability have not yet reached the level required for series production vehicles, and their development will be driven forward at full speed. At BMW we have always used the Formula One project as a technology laboratory for series production. With KERS this approach takes on a whole new dimension. Formula One will re-position itself and undergo a change of image, allowing the sport to take significant strides forward in terms of public acceptance."

The BMW Group already includes a brake energy regeneration system in a large number of its series-produced models as part of its BMW EfficientDynamics package. It is also preparing to introduce BMW ActiveHybrid technology in various model series.

For further information on the BMW Sauber F1 Team please visit the media website **www.press.bmw-motorsport.com** (press releases, press kits, images, TV footage) and the official team website **www.bmw-sauber-f1.com** (car, season, Race Club, team updates).

