

Brose window regulators debuted 80 years ago

(10. November 2008) It was exactly 80 years ago to the month, in November 1928, that the company founder, Max Brose, presented the first window regulator for automobiles to the public at the 21st International Auto Show in Berlin. The trade journal *Auto und Motorrad* reported at the time in its trade fair issue about the great interest that this product innovation, which was groundbreaking for its time, aroused among auto industry experts: "The Atlas window crank systems for the side windows which stand out for their simple design and absolutely safe operation attracted the greatest interest."

Before the Brose window regulators could debut at the 1928 IAA, several years were spent experimenting, planning and securing patents: In 1926, Max Brose acquired the licence for the wrap spring brake which made it possible to hold vehicle windows in any position and in the same year he patented his crank drive for retractable windows." In 1927, he applied for the utility patent for the crank drive with brake under the brand name Atlas."

In 1928, serial production of the first Brose crank mechanisms started in Coburg, beginning the exemplary success story of a product which it is impossible to imagine lacking in any automobile today. By reason of its technological superiority, its advanced production methods and the rapid growth in demand, Brose soon developed into the market leader in this product field.

Following the trend in the US, the demand for greater comfort in the automobile grew in Europe as well in the 1960s: In 1956, Brose presented to the automobile world the window regulator with electric drive" for retrofitting.

In 1963, serial production of electric window regulators on the European market began in Coburg. The BMW 3200 CS coupe is the first vehicle to be equipped with this product. With the development of the first electronic controls for electric window regulators, Brose opened the way for its entry into mechatronics: Electronic pinch protection", in addition to the comfort functions one-touch operation" and central locking/opening," has a sensor system which detects obstructions: If the window is traveling up, it stops and moves down again. Today this technology is a global standard in automobile construction.

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Development continued unabated: With the modular vehicle door, Brose entered new territory, both technically and logistically: The first door system with electric window regulator and glass appears on the Audi 80 coupe.

Through the use of alternative materials, such as plastics or high-strength steel, and a greater degree of component integration, Brose is in the position of being able to save several kilograms of weight in today's vehicles: One example of this is the composite door system which was used for the first time in 2007 on the Ford Edge and Lincoln MKX.