

# News Release

**FOR IMMEDIATE RELEASE**

## **Hitachi Automotive Systems Announces Delivery of Drive Motors for New Model GM Chevrolet Volt**

**Tokyo, November 2, 2016** --- Hitachi Automotive Systems, Ltd. is supplying electric drive motors for the 2016 Chevrolet Volt, an extended range electric vehicle.

The two motors used in the Volt were designed by GM engineers. They feature coils in the stator are bar-wound to enable the flow of a high current in proportion to the size of the coil cross-section. Compared to the stranded wound coils that in typical traction motors, bar wound coils better utilize space in the stator while increasing torque density. Hitachi Automotive Systems has introduced a coil forming technology that enables high-speed and high-precision coil bending, resulting in an approximately 40% increase in the efficiency of the production process.

The rotor has also been redesigned. The magnets used in the rotor previously had to be inserted individually, but a new insertion magazine system has been adopted that enables the magnets to be inserted in a bundle by polarity, increasing the production process efficiency by approximately 60%.

Introducing the above two new technologies improved overall production efficiency by 54%.

The motors for Chevrolet Volt are being produced with these efficient production processes by Hitachi Automotive Systems Americas, Inc., the Regional Headquarters of the Hitachi Automotive Systems Group for Americas, at its Berea Motor Plant in Kentucky, for delivery to the General Motors Warren Plant in Michigan. Hitachi Automotive Systems is strengthening its “local production for local consumption” strategy in this way to expand its community-based customer support system.

Looking to the future, Hitachi Automotive Systems will continue to contribute to the development of electric vehicles through the strengthening of electric powertrain products, by supplying various vehicle manufacturers with motors and other products including inverters and lithium-ion batteries.



New Model Chevrolet Volt



Electric generator motor (left)  
and drive motor (right)

**■About Hitachi Automotive Systems, Ltd.**

Hitachi Automotive Systems, Ltd. is a wholly owned subsidiary of Hitachi, Ltd., headquartered in Tokyo, Japan. The company is engaged in the development, manufacture, sales and services of automotive components, transportation related components, industrial machines and systems, and offers a wide range of automotive systems including engine management systems, electric power train systems, drive control systems and car information systems. For more information, please visit the company's website at <http://www.hitachi-automotive.co.jp/en/>.

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