

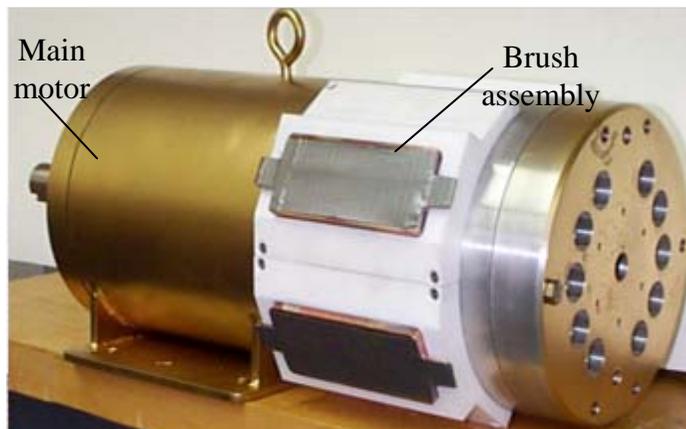
Advanced Brush Technology for Direct Current (DC) Motors

Objective

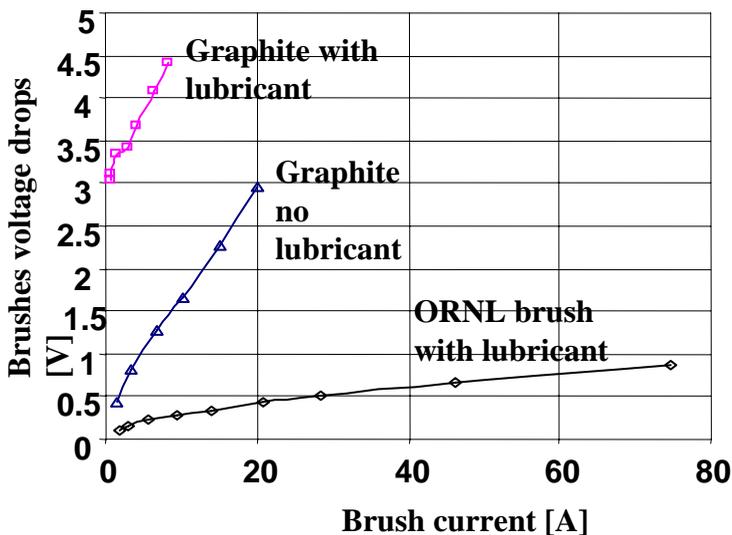
To develop a high power DC motor that can be used at low voltages on future hybrid electric vehicles.

Technology Use

A low voltage (<50 V) motor and electrical system on a hybrid electric system is a lower liability risk than high voltage system.



ORNL researchers have built a 13-V, 4500-A, 55 kW prototype DC motor using brushes designed for high current capability.



Technology Application

A high-power, low-voltage motor can be used in a hybrid electric vehicle. This would allow variable speed control and eliminates the need for expensive inverters or dc/dc converters.

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