

## Parker, FedEx Ground Announce Hydraulic Hybrid Joint Testing Program

CLEVELAND, Dec. 7 /PRNewswire-FirstCall/ -- Parker Hannifin Corporation (NYSE: PH) and FedEx Ground, a unit of FedEx Corp. (NYSE: FDX), today announced they have agreed to test a Class 6 vehicle employing hybrid hydraulic technology that seeks to improve fuel mileage by greater than 50 percent and significantly reduce engine emissions.

(Logo: http://www.newscom.com/cgi-bin/prnh/19990816/PHLOGO)

The new vehicles will rely on a Parker series hybrid hydraulic drive that eliminates the conventional transmission, along with its weight and maintenance, while improving drive train power density. Primary pump/motor components developed by Parker leverage additional technologies developed by the EPA to create a true series hybrid drive as opposed to a parallel system that would increase vehicle weight. The system captures, stores and deploys energy by recovering inertial energy and optimizing engine efficiency, using Parker hydraulic technology.

"This relationship with FedEx Ground marks the latest chapter in Parker's 10-year history of energy saving hydraulic drive systems for commercial vehicles," said Dr. Joseph A. Kovach, Vice President of Technology and Innovation for Hydraulics at Parker. "We are extremely pleased FedEx Ground is working with us as a collaborator for this program."

"In Parker, FedEx Ground has found an excellent resource to help us explore ways to improve the energy efficiency and emissions for our vehicles," said Ron Joseph, Senior Vice President Linehaul, Safety and Maintenance for FedEx Ground. "FedEx Ground is working with Parker to evaluate the hydraulic hybrid technology's viability in dramatically reducing annual fuel costs while significantly reducing engine emissions."

A full suite of Parker products, including specifically-designed and technologically-advanced pump/motors, hoses, fittings, valves, electronic controls, and Parker high efficiency accumulators are incorporated into the design. A working demo vehicle is projected to be available for FedEx Ground within the next 12 months.

Parker expects the technology to have applications with other classes of vehicles.

Today's announcement marks another environmentally-responsive advance by FedEx Corp. FedEx Express, a unit of FedEx Corp., is a leader in the development of other hybrid systems for smaller class four vehicles and has hybrid electric vehicles with more than a million miles of operational service.

The United States Environmental Protection Agency (EPA), as part of a Cooperative Research and Development Agreement (CRADA), will continue providing Parker additional

technical assistance in the development of the vehicle as it has for four years. These include in-kind engineering services, test equipment and facilities. Initial EPA simulation modeling of city driving confirms greater than 50 percent potential improvement in fuel mileage efficiency.

## About FedEx Corp.

FedEx Corp. (NYSE: FDX) provides customers and businesses worldwide with a broad portfolio of transportation, e-commerce and business services. With annual revenues of \$36 billion, the company offers integrated business applications through operating companies competing collectively and managed collaboratively, under the respected FedEx brands. Consistently ranked among the world's most admired and trusted employers, FedEx inspires its more than 280,000 employees and contractors to remain "absolutely, positively" focused on safety, the highest ethical and professional standards and the needs of their customers and communities. For more information, visit <a href="http://www.fedex.com/">http://www.fedex.com/</a>.

## **About Parker**

With annual sales exceeding \$10 billion, Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of commercial, mobile, industrial and aerospace markets. The company employs more than 57,000 people in 43 countries around the world. Parker has increased its annual dividends paid to shareholders for 51 consecutive years, among the top five longest-running dividend-increase records in the S&P 500 index. For more information, visit the company's web site at <a href="http://www.parker.com">http://www.phstock.com</a>.

## Forward-Looking Statements:

Forward-looking statements contained in this and other written and oral reports are made based on known events and circumstances at the time of release, and as such, are subject in the future to unforeseen uncertainties and risks. All statements regarding future performance, earnings projections, events or developments are forward-looking statements. It is possible that the future performance and earnings projections of the company and individual segments may differ materially from current expectations, depending on economic conditions within both its industrial and aerospace markets, and the company's ability to achieve and maintain anticipated benefits associated with announced realignment activities, strategic initiatives to improve operating margins, and growth and innovation initiatives. A change in economic conditions in individual markets may have a particularly volatile effect on segment results. Among the other factors which may affect future performance are: changes in business relationships with and purchases by or from major customers or suppliers, including delays or cancellations in shipments or significant changes in financial condition; uncertainties surrounding timing, successful completion or integration of acquisitions; threats associated with and efforts to combat terrorism; competitive market conditions and resulting effects on sales and pricing; increases in raw-material costs that cannot be recovered in product pricing; the company's ability to manage costs related to employee retirement and health care benefits and insurance; and global economic factors, including manufacturing activity, air travel trends, currency exchange rates, difficulties entering new markets and general economic conditions such as inflation, interest rates and credit availability. The company makes these statements as of the date of this disclosure, and undertakes no

obligation to update them.

SOURCE Parker Hannifin Corporation