

Peterbilt Shows Aerodynamic Features It Says Raise Fuel Economy Up to 12%

By Frederick Kiel
Staff Reporter

DENTON, Texas — Peterbilt Motors Co. introduced new aerodynamic packages for its Models 386 and 384 and “fuel-efficiency packages” for the traditional Models 388 and 389 that it said improved their fuel economy up to 12%.

“Both packages, which we designed through analysis and testing to reduce vehicle drag by up to 24%, will result in an estimated \$5,600 in fuel savings annually for each model, at a distance of 130,000 miles at \$2.30 per gallon of diesel fuel,” said Landon Sproull, Peterbilt’s chief engineer, at the company’s technology center here.

Sproull said the aerodynamic packages, especially for the 386, were developed over a year in cooperation with Wal-Mart Stores Inc., which he said ordered 500 of the “aero” 386 models last year before their official introduction.

“Wal-Mart worked with us,” Sproull said.

Sproull showed a chart analyzing the fuel efficiency of the original 386 compared with unidentified models of five competitive companies. The “aero” 386 was in the top position.

“We ended up at the top of the chart, the No. 1. aerodynamic product in the marketplace,” Sproull said. “We have correlated this . . . analysis to actual wind tunnel tests and real-world fleet tests.”

Peterbilt designed the original 386s and 384s with sloped, aerodynamic lines, while the 388 and 389 retain the classic, long hood design.

Peterbilt spokesman David Giroux said the company could not



A Model 386 tractor outfitted with the aerodynamic package makes on a test drive at Peterbilt’s technology center in Denton, Texas.

give estimated miles per gallon for the various models because engines, other components and usage vary widely.

Peterbilt is a subsidiary of Paccar Inc.

Last year, two competing truck manufacturers each said their new aerodynamic over-the-road models were the most efficient on the road — Freightliner Truck’s Cascadia, part of Daimler Trucks North America; and International Truck’s ProStar, part of Navistar Inc.

The Environmental Protection Agency has given its SmartWay designation to the “aero” 386 and Peterbilt expects its application for the 384 will be approved shortly, Sproull said.

EPA’s Web site says SmartWay-designated products “result in significant, measurable air quality and/or greenhouse gas improvements while maintaining or improving current levels of other emissions and/or pollutants.”

“The Aero Package is a standard feature of our base Model 386 as of

today,” Giroux told TRANSPORT TOPICS Feb. 20. “Customers have the ability to remove certain features based on their application.”

He did disclose prices, but said customers would find full price information at dealers.

Sproull said the proprietary aerodynamic package includes seven components, which are:

- Roof fairing and trim tabs, which help push air up and over the cab and trailer to reduce drag.

- New sleeper roof to smooth the transition between the cab and sleeper roof lines.

- Enhanced chassis fairings recontoured to feature a flair that redirects air flow around the rear tires and wheels.

- Aero battery box/toolbox, which is optimized to provide better airflow under the cab.

- Composite sun visor to cut aerodynamic drag.

- Sleeper extender — a three-inch rubber flair to redirect airflow outward and around the trailer.

- Aerodynamic mirrors.