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## **Pierce+ Lance® 2000 Chassis Redesigned for Comfort and Quicker Responses**

APPLETON, WIS. (March 20, 1998) - Pierce Manufacturing Inc., the leading U.S. manufacturer of custom fire apparatus, introduced its new Lance® 2000 custom fire truck chassis at the Fire Department Instructors Conference in Indianapolis, Ind., on Friday, March 20.

The Lance 2000 is all new from the ground up, including:

- \* the cab interior has been redesigned to provide an open cab environment;
- \* maneuverability has been improved for quicker response times; and
- \* next-generation electronics increase reliability and improve diagnostics.

### **Open, Comfortable Cab**

Pierce's engineers and designers completely restructured the cab to provide a true, open cab environment. The new cab offers 17 cubic feet of additional interior space over the old-style Lance. To achieve that increase, the engine tunnel was tapered and lowered by eight inches for a total height of 28 inches. In addition, the cross tunnel was eliminated so that the officer and driver seats could be moved back to provide each person more leg room.

The redesigned cab offers 11 percent more forward visibility. This was accomplished by integrating the new heating, ventilating and air conditioning (HVAC) system into the instrument panel instead of above the windshield. Similar to systems found in passenger cars, the new HVAC system is more powerful and circulates warm air upward to more effectively defrost the windshield.

"All the firefighters we spoke with were looking for more room and a quieter cab environment. That input really spurred our redesigned Dash® 2000 chassis, and now the Lance redesign project," said Kevin Hanegraaf, chassis product manager for Pierce.

There were improvements to overall ergonomics, too. The driver now has a wrap-around cockpit-like dashboard and overhead console that place the gauges and controls within easy reach. Membrane switches are standard on the instrument panel.

The cab insulation is now 50 percent thicker to reduce both noise and temperature extremes. The result is a quiet environment that allows officers and

crew to communicate clearly on the way to an incident.

The cab is a split-tilt type with a remote control for the electric cab lift system. The new cab is offered in three lengths, with a cab-to-axle measurement of 67, 87 or 94 inches. Ten, 16 and 22-inch raised roof options are available for the crew cab. Seating configurations to accommodate from five to 10 people can be specified.

"The new Lance 2000 offers our customers the flexibility they expect from Pierce, while keeping the classic style," said Hanegraaf. "This package delivers next-generation comfort and technology while continuing tradition."

### **New Steering System Improves Maneuverability**

The Lance 2000 chassis is all new from the ground up. Two of the major improvements are designed specifically to provide a smoother ride, extend truck longevity and provide more maneuverability for quicker response times.

The steering cramp angle has been increased to 45 degrees, even with tires as large as 425/65R22.50. This makes the Lance 2000 agile enough to navigate easily through congested traffic, around tight corners and through narrow streets in older cities and new suburbs. In addition, the vehicle's ride is smoother because of a new tapered-leaf suspension.

The Lance 2000 chassis now has a deep-drop frame. The heat-treated steel frame rails have a 13.38-inch drop, and the RBM (resistance to bending moment factor) has been increased to 2.8 million. Larger frame rails curtail frame deflection and body roll so that handling and ride quality are both improved. These frame rails are comparable to those used in the Quantum® and Dash 2000 chassis.

### **State-of-the-art Electronics Simplify Diagnostics and Service**

Pierce is the first fire apparatus manufacturer to integrate multiplexing technology throughout an entire fire apparatus. Multiplexing technology allows multiple electrical signals to be sent through two wires, whereas previously, a pumper could typically have as many as 250 separate wire circuits. Multiplexing provides a simple, more reliable system for integrating many complex electrical components. Pierce's system is designed to meet SAE J1939 standards.

The Pierce Micro Controller IV is an integrated vehicle control and monitoring system which provides data to two information centers where a range of vital vehicle operating information is displayed. One display is located in the driver's instrument panel. A second display is located at the pump operator's panel. The cab display allows the driver to review items such as response times, fluid levels, pump hours and engine hours. In addition, the information centers provide on-going reminders for preventive maintenance.

The Lance 2000 is available with more than a thousand options, including ALL STEER® electronic all-wheel steering. Engines are available in a range of ratings

from 320 to 500 horsepower. The chassis can be equipped with either Allison model MD or HD automatic transmissions. A 290-amp alternator is standard. A 400-amp alternator is optional.

Pierce Manufacturing Inc. is the leading U.S. manufacturer of custom fire apparatus and a subsidiary of Oshkosh Truck Corporation [NASDAQ - OTRKB]. Products include custom and commercial pumpers, aerial units, rescue trucks, wildland trucks, minipumpers and elliptical tankers. ALL STEER all-wheel steering system is available to the fire service exclusively from Pierce.

Contact Kirsten Skyba in the Public Affairs Office at 920.832.3155 for more information.