AERIAL LADDERS



www.piercemfg.com



Pierce Manufacturing Inc., An Oshkosh Corporation Company P.O. Box 2017, Appleton WI 54912-2017 USA

PERFORM. LIKE NO OTHER.**

Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, but are subject to change without notice. Illustrations may include optional equipment and accessories and may not include all standard equipment. All measurements are nominal values. © Pierce Manufacturing Inc., Pierce and the Pierce logo are registered trademarks, 360° Protection from Every Angle design, and Command Zone are trademarks, and Perform. Like No Other. is a service mark, of Pierce Manufacturing Inc., Appleton, WI. Printed in U.S.A.

P-0024-LADRBR 4/10





There are a thousand variables you can't control. Your ladder isn't one of them.

You use a ladder in the riskiest situations. You need a ladder that you can be absolutely sure of. It needs to perform safely and repeatedly. Run after run. Year after year. In the worst conditions.

Pierce[®] Ladders are designed to power through the hazards: 50 mph winds, uneven terrain, a quarter inch of ice build-up. And they can be equipped with red, green, blue or white LED rung lighting for superior illumination.





Our commitment to your performance and safety starts with an unmatched in-house product development and engineering team. They know what it takes to build aerial ladders that stand up to tough duty, day in and day out. They've spent their careers focused on how to make every Pierce[®] Aerial Ladder safer. Stronger. More stable. More effective.

We then build every Pierce Ladder at our own facilities, where we can keep an eye on quality. Professional engineers conduct exhaustive tests, including finite element analysis, modal analysis and utilize brittle lacquer and strain gauge instrumentation. As a result, Pierce Ladders meet or exceed all NFPA 1901 standards. And after we test it with our own engineers, every apparatus is also certified by independent, professional engineers backed up by UL® and ULC third-party testing.

Different mounts. Different lengths. Even different materials. But the same commitment to safety and performance.



Each ladder is supported by a superior design. One that's fully welded, in compliance with the American Welding Society, by certified welders. Ladder sections are trussed vertically and diagonally and all rungs are welded to each section with k-bracing for rigidity. The ladder device comes with a 20-year warranty against structural failure.

Our easy-to-use, independently controlled horizontal and vertical stabilizers can be positioned quickly and easily. Pierce[®] Ladders will perform at full capacity on severe grades. And short-setting doesn't compromise performance.

The Pierce Torque Box steps up to the challenge with another robust design. It's the backbone of every Pierce Ladder, engineered to transfer all torsional and horizontal loading away from the chassis and body when stabilizers and aerial are deployed. It's been strain-gauge and Type 1, UL® third- party tested. The result? Structural integrity and durability.

The hydraulic system's load-sensing pump operates at low temperatures, so it goes full tilt, no matter what. As an added back-up system, a 12v emergency power unit (EPU) ensures 30 minutes of continuous operation.

In this job, close doesn't count. Our pinpoint aerial feathering controls let you put the ladder where it needs to be. Extend, raise and rotate simultaneously. We've tucked the controls out of harm's way, on the driver's side, to prevent damage to the control console while in transit. And the aerial controls work independently of the engine rpm, so you know you can operate the aerial at any engine speed. Easily visible load charts are located at the aerial operator's positions per NFPA 1901 as standard.

Your crew can move quickly to the top, under the stresses of a fire or rescue, without worrying about stray cables or slippery rungs. We've routed all wires and cables inside sealed base rails, cleared all walking areas of hoses and harnesses and sheathed the ladder rungs in aggressive, composite, photo-luminescent rung covers.



Our egress is easy to replace. If it's ever damaged on a call, you simply replace it with a new one, rather than replacing the entire fly section.





Pierce[®] Bodies feature lateral frame extensions built directly off the chassis frame rails – the strongest part of the truck. That's why we can deliver a 500 lb. compartment floor capacity and a body structure that comes with a 10-year warranty. Maximize every inch of space with our selection of two-way slide-out trays, tilt trays, floor-mounted trays, tool boxes, swing-out toolboards and adjustable partitions.

You can customize your Pierce Ladder to the particular demands of your situation with a range of options:

- Quick-lock waterway
- Creeper controls at tip
- Breathing air at tip
- Rescue options
- 110v/220v power to tip
- Lighting options at tip
- Locator beacons
- Waterway pre-connect at tip
- Roof ladder mountings
- Pike pole and axe mounting
- Luminescent rung covers
- Optional LED rung lighting



Pierce° 75' & 100' Aluminum Ladders

between an aluminum rig and getting Pierce performance. Pierce® Aluminum Aerial Ladders show the same commitment to safety and performance that you see in every Pierce aerial.

It starts with strength. Pierce Aluminum Aerial Ladders can take on plenty of options and still haul 500 gallons of water and 115 feet of ground ladders. This rear mount uses high-strength, 6061-T6 aluminum extrusions so it's durable and stands up to stress and both 75' and 100' lead the industry with a 750 lb. dry tipload capable of flowing up to 1,500 gpm.

They also deliver the highest distributed load ratings of any aluminum ladder in the industry. And you can add up to 100 lbs. of additional firefighting equipment at the tip without reducing the rated load capacity. For added stability, Pierce's renowned H-style

The ladder is aluminum. The thinking behind it is pure Pierce.







Pierce[®] Heavy Duty and Super Heavy Duty Ladders



The Heavy Duty comes in 75' and 105' models. Each delivers a rated load capacity of 500 lbs. (or optional 750 lbs. on the 105' model) in winds up to 50 mph. They allow 100 lbs. of additional firefighting equipment at the ladder tip, at all angles, at full extension without reducing rated load capacity. And they can carry that load while flowing up to 1,000 gpm with a 180° horizontal nozzle sweep at full extension from -5° to $+75^{\circ}$. Pierce[®] Ladders aren't just stable at the top, they're strong throughout, able to take heavy loads over the length of the structure. They take distributed loads at any elevation angle.

The only thing tougher than our Heavy Duty Ladders is our 100' Super Heavy Duty Ladder, with an industry-leading 1,500 lbs. dry and 1,250 lbs. wet rated load capacity in winds up to 50 mph. They allow 150 lbs. of additional equipment at the ladder tip without reducing the rated load capacity.

Depending on the model, these rigs come with two or four H-style stabilizers for the utmost in stability. (The 75' aerials only require rear stabilizers and there's no additional stress on the front axles.)

Stabilizer spreads are 16' on the 75', 14' on the 105', with a tipload rating of 500 lbs. or 16' with the optional 750 lb. tipload and 18' on the Super Heavy Duty Ladder.

- Heavy Duty Ladders can be mounted on a wheelbase as short as 195"
- Environmentally sealed ladders resist corrosion
- Rotation interlock system prevents rotation of the ladder on the short-jacked side
- No matter where the ladder is positioned, you have easy access onto and off of the turntable
- Large compartments for ample storage
- Lateral body frame extensions carry heavy equipment loads with ease





- Replaceable egress section for cost-effective replacement
- Climb with confidence. We've routed all wires inside sealed base rails
- All walking areas are cleared of hoses and harnesses, and ladder rungs are sheathed in aggressive, composite, photo-luminescent rung covers



- Optional load sensing alarms/strobes indicate capacity overload
- Patented quick-lock waterway for choice of master stream position
- 70,000 psi yield strength steel stands up to any emergency

With a Pierce[®] Mid-Mount, performance is anything but middle of the pack.

The Pierce® 100' Mid-Mount Ladder is the industry's most advanced, with a low overall height and short travel length that make it an ideal choice for departments that require maximum maneuverability.

The Pierce Mid-Mount features a rated load capacity of 750 lbs. in winds up to 50 mph. It even <u>allows 100 lbs. of additional firefighting equipment at the ladder tip, at all angles, at full extension</u>



without reducing the rated load capacity. And it can carry that load while flowing 1,500 gpm with a 180° horizontal nozzle sweep at full extension from -8° to +75°.





Need immediate information on water flow, stabilizer condition and temperature at the tip? Command Zone® advanced electronics provide it in real-time on a super-visible, easy-to-use display screen. Its collision avoidance feature even automatically protects the body and cab from damage. Bottom line, you get the information you need, when and where you need it.

Turntable stairwells – one on each side of the truck – provide easy access to the 100" wide turntable.



Sometimes ladder maneuverability is pivotal.

Congested streets. Corners built for horses and buggies. In some places, getting to the scene is half the challenge.

The Pierce® 100' Heavy or 100' Medium Duty Aerial Tiller swivels to turn tight and maneuver easily. The ease of maneuvering starts before you even get behind the wheel. Doors contoured into the tiller cab give you greater clearance for entering and exiting. The distinctive Pierce windshield maximizes visibility in the front; we've removed the A-pillar for greater visibility. When you're on the road, a one-piece fifth wheel design gives you an extra 14 degrees of break over angle.

For a smoother ride, better handling and increased stopping power, TAK-4® independent suspension comes standard on the rear trailer.

The tractor drive axle is available in either a single or tandem configuration to comply with stringent weight law restrictions.

And this rig is built on a super strong foundation. The upper and lower plates of the chassis C-channel frames are certified at 80,000 psi yield strength.

ITA KIPA

When you arrive on the scene, you've got as much gear as you can pack into nearly 500 cubic feet of storage space. Ladder storage flexibility allows for up to 250 feet of ground ladders to meet your department's needs.

The Heavy Duty Tiller delivers a rated load of 500 lbs. in winds up to 50 mph and allows 100 lbs. of additional firefighting equipment at the ladder tip, at all angles, at full extension from -5° to +75° without reducing the rated load capacity. The Medium Duty Tiller delivers a rated load of 250 lbs. with full extension from -5° to +39° and a 500 lb. rated load capacity of $+40^{\circ}$ to $+80^{\circ}$ which can deliver 1,000 gpm while fully extended, at all elevations.





for maximum firefighting flexibility.

It's all available in your choice of custom chassis. And once you're on your way, the aerial ladder stores below horizontal position for greater tiller driver visibility and safety.



Medium duty. Heavy on value and performance.



The Pierce[®] 100' Medium Duty Ladder helps you get the most value for your dollar. While engineered to outperform, it is also constructed from 70,000 psi yield strength steel.

This ladder features a rated load capacity of 250 lbs. at full extension from -5° to $+39^{\circ}$ and a 500 lb. rated load capacity from $+40^{\circ}$ to $+80^{\circ}$. You can flow 1,000 gpm with a 180° monitor horizontal sweep while fully extended and at all elevations from -5° to $+80^{\circ}$.

The 100' comes with a set of H-style stabilizers with 12" of stabilizer penetration. The 100' also gives you 17.2' spread which can be short-jacked to 12.5'.



Choose Pierce Ladders. Get Pierce commitment.

Aerial ladders aren't simple devices. You need a team that will stand behind you and your equipment. We offer comprehensive training to help you understand how to take advantage of your ladder's many capabilities. An in-house customer service department and dealer network provide true 24/7 support.

Nothing better demonstrates Pierce's commitment to helping you perform than our commitment to excellence. We are the first in the industry to certify hydraulic oil cleanliness by the rigorous ISO 4406:1999 Standard for Code Contamination by Solid Particles. What does that mean for you? Reduced component wear, decreased need for repairs and longer life cycles for your apparatus.

And we make regular maintenance easy in all kinds of ways. We use stainless steel hardware for corrosion resistance, non-grease sheaves and locate the hydraulic filters where your maintenance team can access them.

Call your Pierce dealer, or talk to a neighboring department that runs a Pierce[®] Aerial Ladder. We're ready to help design and build the ladder that's best for your community, safest for your crew and up for every challenge.