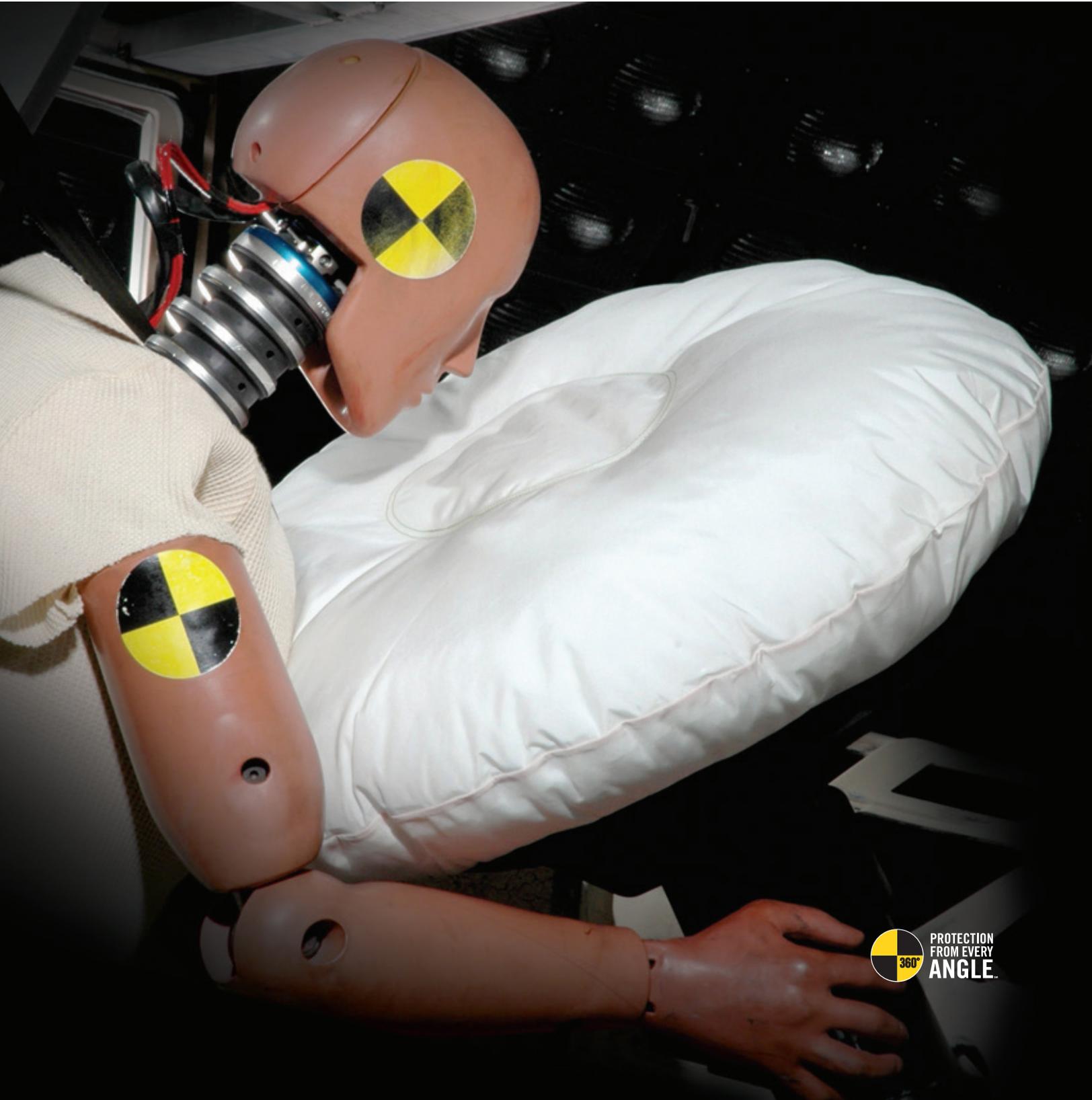


SAFETY SYSTEMS



An Oshkosh Corporation Business



 PROTECTION FROM EVERY ANGLE.

YOU'RE ALWAYS LOOKING OUT FOR OTHERS.
FORTUNATELY, SOMEBODY'S LOOKING OUT FOR YOU.

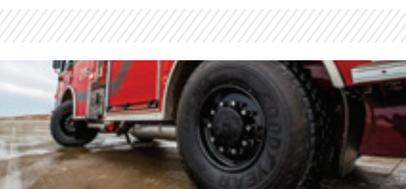
AT PIERCE, WE DON'T JUST MEET SAFETY REQUIREMENTS.
WE SET SAFETY STANDARDS. WE OFFER NOTHING LESS
THAN 360° PROTECTION FROM EVERY ANGLESM.

BECAUSE THAT'S WHAT'S EXPECTED OF THOSE WE SERVE.





Coverage starts with the chassis.



TAK-4 T3™ Independent Rear Suspension

Pierce® chassis are researched, engineered, tested, and built with industry-leading safety features and equipment. Some of these innovations are apparent while others are invisible, but all are essential.

From bright exterior lighting to latching interior storage spaces and a mission-critical electrical system on Command Zone™ equipped trucks, Pierce apparatus provide the safety to match their performance. Below are just some of the ways we ensure 360 degree protection.

- Side roll protection system for occupant protection
- Frontal air bags for occupant protection
- TAK-4® Independent Suspension systems
- Seat belt warning system ensures occupants are properly buckled
- Collision avoidance system warns before accidents can occur
- Lateral G-roll indicator alerts driver to excessive chassis roll
- Interior dome lights enhance nighttime visibility
- 13.38" frame rails reduce frame beaming & improve ride stability
- Electronic Stability Control (ESC)
- Ready reach seatbelts make buckling up 1-handed & hassle-free
- Noise insulation & soundproofing provide a quieter cab interior
- Tinted windows reduce solar load
- Roll Stability Control (RSC) auto braking system helps prevent side rolls
- Tire protection system including tire monitoring & tire blowout band protection
- Camera vision systems display obstacles clearly
- PS6® & PSV® seats enhance comfort & safety



Occupant protection.

Pierce goes above and beyond with cab structural integrity standards. Pierce® cabs are rigorously tested to ensure ample survival space is maintained when the apparatus is involved in a crash.

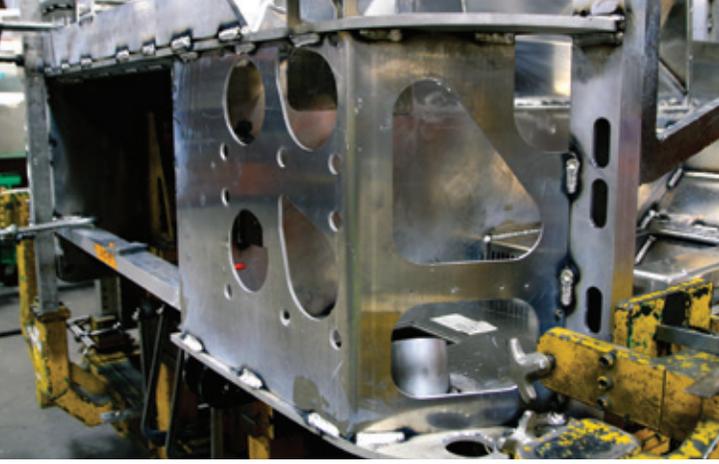


Every cab model is crash-tested at the Center for Advanced Product Evaluation (CAPE), a division of IMMI, to meet or exceed the cab integrity requirements relative to occupant protection.

Cabs are subjected to static roof and side crush testing, as well as dynamic frontal and side impact testing, to simulate the forces a cab would experience in a rollover accident. To pass these rigorous tests, the occupant survival space cannot be compromised during any of the required test loads.

All Pierce custom cabs passed the dynamic tests at 2 times the required level of energy. And the static roof test proved that all Pierce cabs can withstand 4 times the required test loads.





The thickest firewall in the industry.

It starts with .25" aluminum welded to a .5" thick engine tunnel that is tied to the doorposts with a .5" thick semi-crosscar support, providing a rigid front that holds the cab together. This offers greater occupant protection in the event of a frontal crash plus greater shroud protection should an engine mishap occur.



Frontal air bags.

We're never satisfied when it comes to occupant safety in Pierce apparatus. The logical evolution in 360 degree protection was the offering of frontal air bags – an industry first in custom chassis.



Side roll protection.

Custom chassis:

We've thought of all passengers. Our side roll protection system design was tested not simply for an average occupant but with crash dummies ranging from 5th percentile females to 95th percentile males. The evolution of our PS6® and PSV® seats allow for side roll air curtains to be fully integrated into the seating system rather than deploying from the wall, another first in the industry.

360° Protection From Every AngleSM starts with minimizing the risks of 90-degree side rolls. But it doesn't end there. Side roll protection is default on Pierce custom chassis.

Commercial chassis:

Pierce worked with IMMI and CAPE to develop a program to test and certify the side roll protection system and cab structural integrity of the Freightliner cab. This application was the first in the commercial market for multiple cab configurations.

The integration of the side roll protection system in the Freightliner commercial chassis is exclusively available in Pierce fire apparatus. Our side roll protection systems help protect occupants by allowing for side roll air curtains to be fully integrated into the seating system rather than deploying from the wall in a crash or rollover event.



The suspension that raises standards: TAK-4 Independent Suspension systems.

Pierce was the first custom fire truck manufacturer in North America to offer a proprietary independent front suspension. TAK-4® Independent Front Suspension offers a 45 degree cramp angle, delivering a tighter turning radius, better handling, and more vehicle control.

It shortens stopping distance by up to 23 percent, improves ride quality by 340 percent, increases load-carrying capacity, improves durability, and simplifies maintenance. With the torsion bar lock system, vehicle lean can be adjusted within 15 minutes.

Pierce also offers TAK-4 Independent Rear Suspension as well as TAK-4 T3™, which combines the advantages of independent rear suspension with a 100 percent mechanical rear steering system for enhanced maneuverability.

NFPA 1901 UL certification plus
UL Canada (ULC) certification.



Pierce is the first fire apparatus manufacturer to be both third party certified to the latest NFPA 1901 edition and ULC Canada ULC-S515 standards by Underwriters Laboratories. Stages of testing include road, pump, weight, brake, performance, and aerial application. All products must pass all tests before a truck is released into Canada. This commitment to quality also applies to trucks sold in the United States.

360 degree backup cameras.

Vehicle mounted camera systems provide another layer of situational awareness and blind spot mitigation around the vehicle. Common options range from a single rear facing camera for safe backing of the vehicle, to multi-camera full 360 degree switched view systems that allow the operator to see the entire perimeter of the vehicle in a single glance.



Bonded, curved windshield.

With no center post obstruction, the single-piece windshield opens sight lines and reduces the risk of accidents with clear views of the road, pedestrians, and traffic. Available on Enforcer™, Impel®, Saber®, and Velocity® custom chassis.



Forward-mounted one-eleven mirrors on the Impel and Velocity.

Pierce's exclusive one-eleven mirrors make these chassis the only custom OEM fire trucks to meet FMVSS-111 visibility standards for school buses. They minimize body and head movements of the driver, and ensure the officer's position does not interfere with passenger side mirror visibility. This positioning provides visibility to the front bumper as well as along the sides of the body, and narrows overall width of the vehicle by as much as 8".



Aeroclave decontamination spray system.

This system allows firefighters the ability to quickly disinfect the cab surfaces. Simply connect a hose loaded with the cleaning solution to the port on the outside of the cab. It brings it into the cab to clean all the surfaces- even the hard-to-reach places.



Cab air filtration system.

The Active Air system sanitizes the cab air and surfaces. It eliminates 99% of germs, microbes, viruses, and bacteria. The system is fully enclosed and can be in operation while the cab is occupied.

The system has a lower overall cost than traditional methods and does not cause damage to surfaces.

It is available on all Pierce custom chassis, including units already in service.



Automatic folding steps.

Pierce air-actuated steps fold out automatically when the door is opened. A large first step is provided as low as 16" from the ground. This makes cab exit and entry easier and safer, especially when suited up and carrying gear.

The large-area step height is a consistent 16". And since the steps foldaway automatically when the doors close, they stay clear of ice, snow, and mud.

Available on Impel® and Velocity® chassis.

Lighting night mode.

While bright lights make rescue vehicles visible to motorists from a distance, the lights can be blinding to motorists who are passing by the scene.

Departments can choose a lighting package containing dimmer lights to create a safer environment for motorists. The flash pattern is also slower to improve motorist visibility.



Pierce exclusive seats.

The first custom-designed, safer, and noticeably more comfortable seats in the industry, featuring built-in side roll protection.

PS6[®] and PSV[®] seats feature double-length seat belts and dual retractors that can be pulled quickly and comfortably over a firefighter in full turnout gear. The seats can also be retrofitted into many existing chassis.

- Side roll protection
- Dual seat belt retractors & double-length seat belts
- Hands-free SCBA holders
- Lumbar support
- 7.5 degree (PS6) & 5 degree (PSV) angles of recline
- 17" cushion (front to back)





Collision avoidance.

Pierce offers HAAS Alert collision mitigation technology. The system sends motorists real-time alerts to notify them that an emergency vehicle is approaching. The technology is also equipped to send notifications to other emergency vehicles to reduce the likelihood of a collision.

Tire protection system.

The Pierce Tire Pressure Management System uses sensors to monitor tire pressure/temperature and display them in the cab. Proper tire inflation reduces maintenance downtime, fuel costs, tire and tread wear, tire blowouts, tread separation, tandem axle tire wear, and heat-related tire problems.

Exclusive to Pierce in the fire industry, the Tire Blowout Protection Band features a safety band attached to a recessed drop inside the wheel. This prevents the tire from coming off the wheel during a blowout and assists the driver in maneuvering and slowing down in a safe manner.



Electronic stability control.

An automatic safety management braking system, Electronic Stability Control (ESC), enhances the directional and roll stability of fire apparatus during evasive maneuvers.

- Monitors lateral acceleration (cornering) of the vehicle & activates when the critical roll threshold is met
- Automatically reduces engine rpm, applies engine retarder (if so equipped), & selectively applies brakes to individual wheel ends of the front & rear axles to assist in bringing the vehicle back to its intended direction
- Reduces the possibility of the vehicle rolling on its side
- Monitors directional stability through sensors & compares the actual direction of the vehicle versus the direction you travel
- Reduces the possibility of spinouts or driftouts, even in poor traction conditions



Safety to protect those who protect others.

We continuously strive to meet and exceed the highest safety requirements and standards in everything we do at Pierce. You've made the choice to protect others. Pierce has made the choice to return the favor with regular updates to the safety systems found in each of our vehicles.



www.piercemfg.com



Pierce Manufacturing Inc.
P.O. Box 2017, Appleton WI 54912-2017 USA

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.

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