



Pentalift Equipment Corporation

Pentalock MFR32 Mechanical Vehicle Restraint Maximum Product Value in Preventing Loading Dock Accidents

The Pentalock MFR32 Vehicle Restraint offers rugged design, simple operation, minimal maintenance and maximum product value. The loading dock has been rated as one of the most hazardous areas within most facilities. Serious loading dock accidents can result from such things as premature truck departure, trailer creep and collapsing landing gear on spotted trailers. The Pentalock MFR32 Vehicle Restraint is a practical solution to loading dock safety concerns. The simple and reliable operation promotes continued use by the dock attendant. It's mechanical design makes the restraint easy to both install and maintain. The 10-1/2" lowered height accommodates new trailers with increasingly lower Rear Impact Guards.

Features and Components:

32,000 lb. Restraining Capacity

Gas shock activation provides simple effective operation and allows automatic height compensation over the entire operating range. The gas shock is designed to function in the most extreme weather conditions.

Computer optimized lowering mechanism allows low effort disengagement of the restraint in conjunction with lowering handle.

Operating "T" handle is utilized to activate and disengage the MFR32 vehicle restraint.

PTFE bushings in combination with Hard Chrome plated pins for reduced maintenance, on all pivot points.

Flood resistant design.

Note: Restraint is shown in the raised position

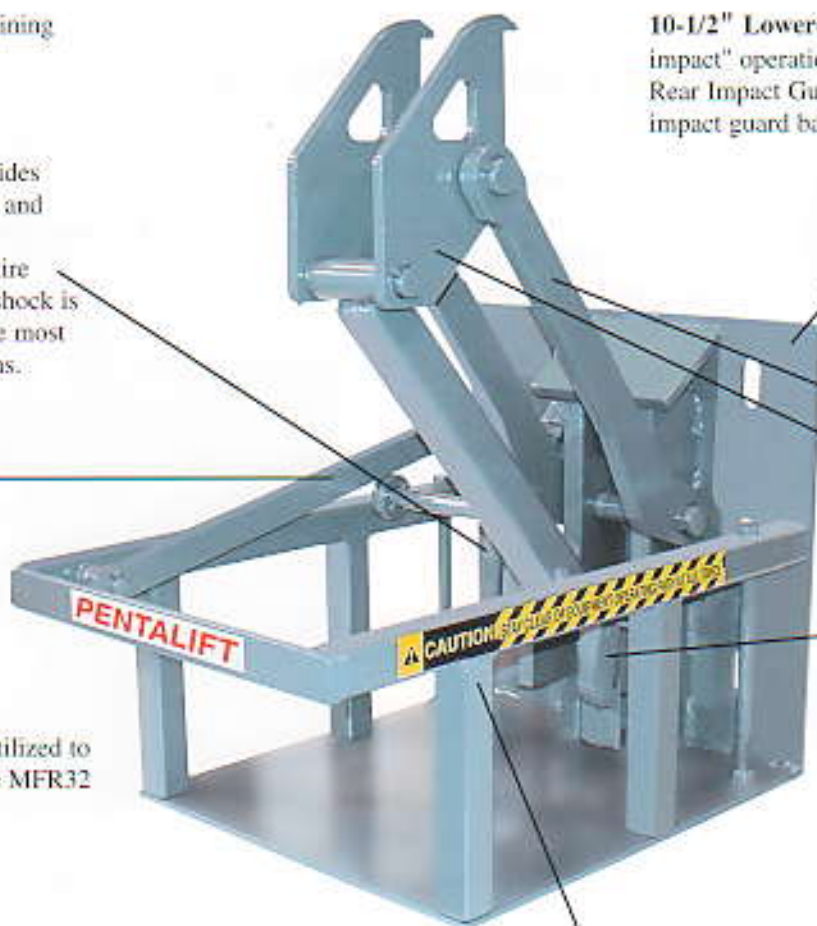
10-1/2" Lowered Height facilitates "No impact" operation. Accommodates new vehicle Rear Impact Guards and meets 1998 NHTSA rear impact guard bar regulations for trailers.

Heavy - Duty mounting plate ensures simple yet secure installation.

100,000 PSI yield strength on structural steel arms and hooks

Positive lock-down mechanism holds unit in lowered position and allows easy release for engagement.

Rugged structural guard protects Pentalock MFR32 from impacts such as snow removal equipment and yard trucks. "Open" design allows dirt and debris to naturally move away from restraint components as opposed to competitive designs with boxed in housings that retain and hold dirt and debris that fall into the restraint.



Optional Light Packages for Pentlock MFR32 Mechanical Vehicle Restraint :

Communication System

To facilitate enhanced communication with dock attendant and truck driver regarding the status of the loading / unloading operation and further increase dock safety.



Manually activated NEMA 12 Control Panel, with two-position selector switch. High visibility lights are clear and bright.



Exterior high visibility, deluxe lights and dual image safety yellow instruction signs provided as standard. Narrow width of light and signs facilitates easy installation between dock seal side pads.



Automatic Communication Light System



A further enhancement to the Deluxe Light System shown above. The Pentlock MFRSA32 Vehicle Restraint is equipped with a signal arm to automatically sense the vehicle Rear Impact Guard when it is engaged and restrained.

The signal lights are automatically switched appropriately, when the signal contacts the trailers Rear Impact Guard. Incorporates NEMA6 watertight and corrosive duty limit switch to ensure reliability.



Model: MFRSA32

Other Available Options Include: Zinc Plated Finish, LED (Red / Green) Outside Light, Handle Storage Bracket,

Consult a Pentalift Sales Representative for additional information or equipment recommendations.

Note: Some photos may reflect products with optional features. All Pentalift Equipment Corporation products are subject to design improvement through modification without notice.

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Direct and indirect costs of an industrial accident at the loading dock can easily exceed \$1,000,000 and result in increased insurance costs. The Pentalift HFR32 vehicle restraint safety system reduces the potential for such an accident.

The Pentalift model HFR32 vehicle restraint safety system offers rugged design, simple and reliable hydraulic operation, minimal maintenance and maximum product value. The loading dock has been rated as one of the most hazardous areas within most facilities. Serious loading dock accidents can result from such things as premature truck departure, trailer creep and collapsing landing gear on spotted trailers. The Pentalift model HFR32 vehicle restraint safety system is a proven solution to loading dock safety concerns. The reliable hydraulic operation promotes continued use by the dock attendant. The 10-1/2" lowered height accommodates trailers with increasingly lower rear impact guards (R.I.G.).

Features:

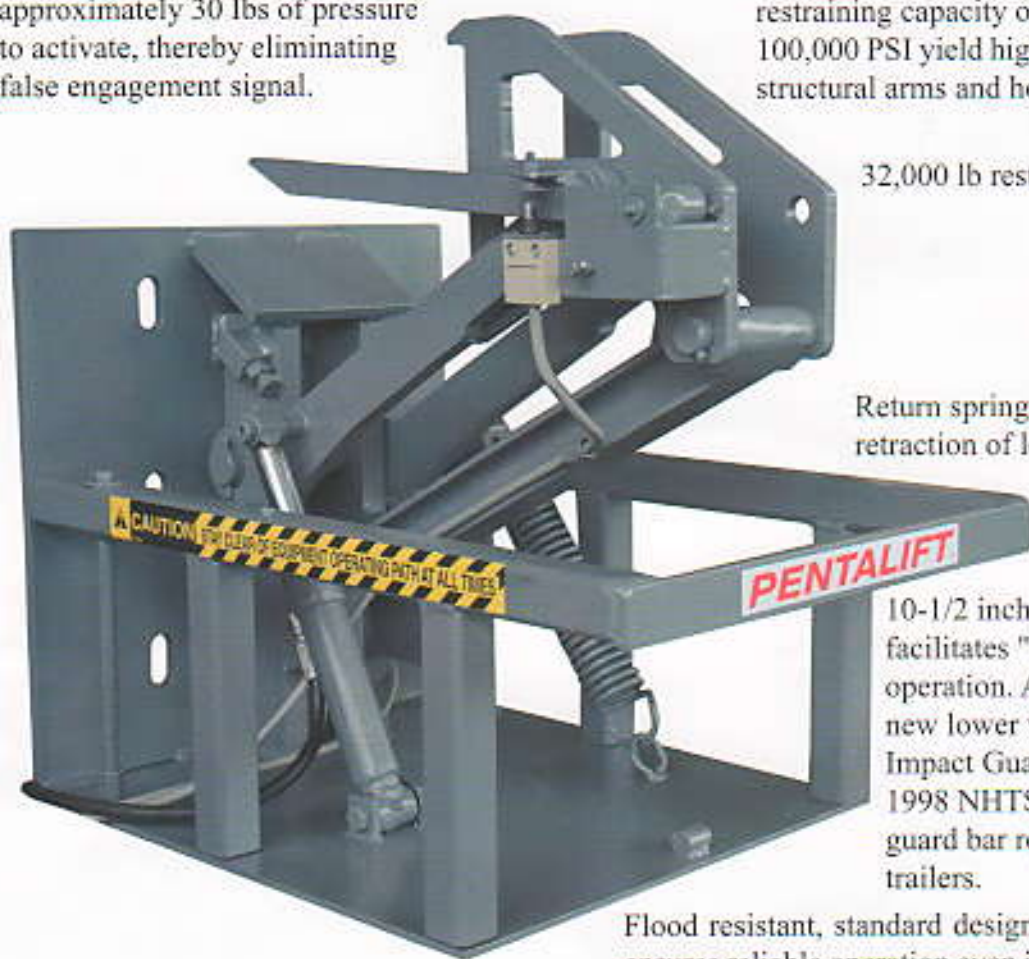
Proven hydraulic operation ensures that the vehicle restraint will function reliably, in the toughest environments. This is very important based on the harsh environment that most restraints are subjected to. Hydraulic systems have been proven to be extremely reliable and durable. Due to this, hydraulic systems are the activation method of choice in industries such as aircraft and heavy construction equipment. The use of hydraulics on a vehicle restraint eliminates problems associated with relying on external electric motors, linear activators and / or gas spring operation that are incorporated by other manufacturers.

Signal Bar requires approximately 30 lbs of pressure to activate, thereby eliminating false engagement signal.

Heavy - Duty mounting plate ensures simple yet secure installation.

PTFE bushings in combination with hard chrome plated pins for reduced maintenance, on all pivot points.

Watertight and corrosive duty limit switches are suited for harsh applications.



Dual side-by-side hook arrangement effectively increases the rear impact guard holding strength and the restraining capacity of the restraint. 100,000 PSI yield high strength steel on structural arms and hooks.

32,000 lb restraining capacity.

Return spring ensures positive retraction of locking assembly.

10-1/2 inch Lowered Height facilitates "No impact" operation. Accommodates new lower vehicle Rear Impact Guards and meets 1998 NHTSA rear impact guard bar regulations for trailers.

Flood resistant, standard design and construction ensures reliable operation even if the unit has been submerged. Other manufacturers offer this feature as an option or not at all.

Note: Vehicle restraint is shown in a partially raised position.

Rugged structural guard protects the restraint components from impacts such as snow removal equipment and yard trucks. "Open" guard design allows dirt and debris to naturally move away from restraint components as opposed to competitive designs with boxed in housings that retain and hold dirt and debris that fall into the restraint. With other manufacturers restraints, the boxed in housing causes cleaning of the restraint to be more involved and more frequent.

Communication System Components



Interior sign directs lift truck operator to load/unload on green light signal only.

Exterior high visibility, LED deluxe lights and dual image safety yellow instruction signs are provided as standard. Narrow width of light and signs facilitates easy installation between dock seal side pads. LED lights ensure long, reliable and energy efficient operation.

Control Panels



NEMA 12 interior wall mount control station. High visibility interior signal lights are coordinated with exterior signal lights. Clear, concise and easy to follow instructions guide dock attendant on how to use the system. Selector switch and amber light accommodate "override" mode. CSA certified for the design and manufacturer of industrial control equipment.



Combination control panels combine the controls for loading dock equipment such as vehicle restraint system, hydraulic dock leveler, overhead door and inflatable dock shelter into a single common panel. This ensures proper use and sequencing of equipment for increased safety and ease of operation.

Reliable Hydraulics



Hydraulic power unit is compact and easily installed on interior wall of loading dock or under the dock leveler. Internal wall mount installation safely positions motor and pump assembly away from the elements, condensation and the potential impact of an incoming vehicle. When purchased in conjunction with a Pentalift hydraulic dock leveler, the operation of the Pentalift model HFR32 vehicle restraint safety system and hydraulic dock leveler are combined into one single hydraulic power unit for decreased maintenance and increased reliability.

Why the Ultrahook UHR40?

Our competitors hope that you do not discover why the Ultrahook UHR40 is properly positioned. However, for the ultimate in safety and reliability, you should.

Existing loading docks can be easily modified to accommodate an Ultrahook UHR40 installation.

In most facilities, the loading dock is the harshest and least considered area from a maintenance and cleanliness standpoint. The Ultrahook UHR40 is installed under the dock leveler which reduces maintenance and maximizes the reliability.

Loading docks are a necessity. Selecting the safest vehicle restraint is a responsibility.

Ultrahook UHR40 Safety System Design Features

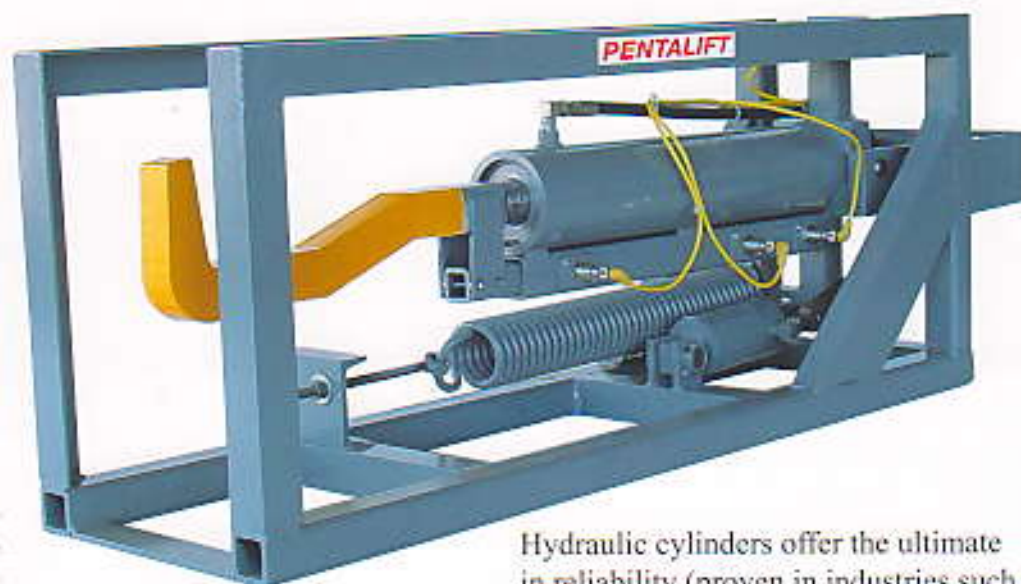
The Ultrahook UHR40 is installed under the dock leveler which reduces maintenance and maximizes the reliability. When in use restraining the trailer, the only component that extends is the heavy steel hook. When not in use the entire assembly is safely stored and protected under the dock leveler. The main working components are away from weather, dirt and debris.

Simple and reliable design offers easy installation and minimal maintenance.

Heavy-Duty Steel Hook, constructed from 1-3/4" thick, 50,000 PSI minimum yield steel plate provides a 40,000 lb. draw bar rating.

External float spring facilitates easy adjustment and allows the Ultrahook UHR40 to fully float with the trailer suspension.

The Ultrahook UHR40 operation assures that there is no "gap" between the restraining hook and the rear impact guard of the trailer. The elimination of any "gap" further increases the holding power of the Ultrahook UHR40, by not permitting a restrained trailer to develop momentum during an unscheduled departure attempt.



Hydraulic cylinders offer the ultimate in reliability (proven in industries such as aircraft and heavy construction equipment), eliminating problems associated with external electric motors, linear activators and / or gas spring operation.



To facilitate simple installation and retrofitting a "pour in place" pan version is available. It comes with a removable steel cover to keep out concrete and debris during installation.

Pentalift Ultrahook UHR40 Communication System



Interior sign directs lift truck operator to load/unload on green light signal only.



Exterior high visibility, deluxe lights and dual image safety yellow signs are provided as standard. Narrow width of signs facilitates easy installation between dock seal side pads.



Ultrahook UHR40 is shown in the stored position ready to accept the trailer. All of the restraint components are protected under the dock leveler, away from snow, ice and debris. The installation provides a "clean" appearance.

No "Gap" Increases Restraining Capacity



Once the truck is positioned the Ultrahook UHR40 reaches out and pulls in to hook and securely hold the trailer while loading / unloading takes place. The only component that extends beyond the pit is the heavy-duty steel hook.

When the Ultrahook UHR40 engages, it draws firmly up against the rear impact guard of the trailer. Unlike other types of restraints there is no "gap". The benefit of eliminating the gap is that it stops the trailer from gaining momentum in the event of an unscheduled departure attempt. If momentum is gained it increases the forces applied to all the components holding the trailer. These include the rear impact guard of the trailer, the wall that the restraint is attached to and the restraint itself. Other designs of restraints permit a gap and momentum to exist. The Ultrahook UHR40 does not.