

Engineered for Safety

Pentalift Model MDHCK Hydraulic Conversion Kit

This Hydraulic Conversion Kit is designed to retrofit a Pentalift Mechanical Dock Leveler. Hydraulic dock levelers offer push button operation, improved reliability and less maintenance and repair costs than mechanical dock levelers. The conversion kit is an economical alternative to replacing an existing dock leveler. This upgrade is designed to cost considerably less than full replacement of the existing dock leveler and / or installing a conversion kit that is not designed specifically for the Pentalift brand dock leveler.

Before:



Mechanical dock levelers require more maintenance and adjustment than hydraulic dock levelers. To activate a mechanical dock leveler a chain is manually pulled. Issues with mechanical activating mechanisms can create ongoing concerns. To address these concerns Pentalift offers a hydraulic conversion kit that is economical and easily installed into the mechanical dock leveler. The conversion kit provides many benefits as listed in more detail below.

After:



The dock leveler is converted to hydraulic operation. Simple push button operation activates and controls the dock leveler. The reliability, safety and efficiency of the loading dock are dramatically increased. The converted dock leveler can be interlocked with other dock equipment such as vehicle restraints, overhead doors and dock lights. The conversion kit is economical to purchase and easy to install.

Ergonomics: Converting the dock leveler to push button operation from manual release chain operation improves ergonomics. Operators are not put at risk from bending and pulling the manual release chain. As well, concerns with the limitations of lighter operator's ability to walk down the mechanical dock leveler are eliminated.

Safety: Push button operation simplifies and assists operator control, thereby increasing safety. Dock leveler can be interlocked with vehicle restraint, overhead door and other equipment.

Hydraulic Operation: Both the deck assembly and the lip operator are activated by the hydraulic cylinder. **Reliability:** Elimination of mechanical components such as hold-downs and the lifting spring mechanisms reduces breakdowns and down time.

Push Button Operation: NEMA 12, wall mounted push button facilitates simple and efficient operation of the dock leveler.

Maintenance & Operating Cost: Costs are significantly lowered or eliminated through hydraulic conversion. Reduced Noise Levels: Smoother hydraulic operation reduces operating noise levels.

Main Components of Pentalift MDHCK Hydraulic Conversion Kit



Push Button Control

The dock leveler is converted from manual release chain activation to simple, reliable push button operation. The push button is NEMA 12 rated.

Electro-Hydraulic Power Unit Incorporates 115/1/60 1/2 HP to enclosed motor. The power unit is provided with a wall mount bracket and is designed to be installed on the loading dock wall. It can also be installed underneath the dock leveler. Simple and reliable even in the harshest applications. The 1/2 HP rating allows the power supply to be a standard 115/1/60 wall receptacle.

Pre-wired to eliminate field wiring

The wall mounted arrangement is prewired at the factory to plug in a standard 115/1/60 receptacle. The control panel and power unit are pre-wired to eliminate in the field wiring.

Hydraulic Cylinder



The hydraulic cylinder is manufactured by Pentalift. It is designed specifically for use in the harsh environments that dock levelers are subjected to. The cylinder incorporates hardened chrome cylinder rams. High quality urethane hydraulic seals provide reliable leak proof operation.

Lowest cost hydraulic conversion kit available

To our knowledge the MDHCK model conversion kit is by far the lowest cost conversion kit available for Pentalift brand mechanical dock levelers. The savings are a result of both manufacturing costs and installation costs. More specifically the contributing factors are:

- Single cylinder arrangement utilizes the existing dock leveler lip operator. This eliminates the cost of supplying and installing a lip cylinder as well as the additional hydraulic valves to sequence and operate the lip cylinder. Installation is simplified and installation times are greatly reduced based on this.
- Conversion kit utilizes the existing mechanical dock leveler frame lower thrust beam as the installation point for the lower cylinder pivot point. This reduces the structural parts required to be supplied and greatly reduces the field installation times required by eliminating the substantial welding that is typically required to accommodate the lower cylinder pivot point.
- As indicated and shown above the push button and hydraulic power unit are pre-wired to eliminate field electrical costs. The power supply is a standard 115/1/60 wall receptacle. This eliminates the need to provide a dedicated electrical supply. Costs of this nature can be very substantial and are eliminated by this conversion kit configuration.

Consult a Pentalift Sales Representative for additional information or equipment recommendations Note: Some photos may reflect products with optional features. All Pentalift Equipment products are subject to design improvement through modification without notice.

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