

GRH-700 Dok-Lok® Vehicle Restraint

Rotating hook provides safety and productivity.



Straight Shank Hook

- » Commonly used in non-Rite-Hite® rotating hook restraints
- » Designed to secure trailers equipped with ICC Bars (outlawed in 1998)
- » Lacks ability to safely secure many RIG equipped trailers, creating a false sense of security and putting people at risk for all trailer separation accidents.

Rite-Hite Contoured Hook

- » Utilized in all Rite-Hite® rotating/shadow hook Dok-Loks
- » Designed to entrap RIG equipped trailers (mandated since 1998)
- » Provides most wrap in the industry to create entrapment necessary to help prevent all types of trailer separation accidents.

The Original, Always Improving Trailer Restraint

Rite-Hite® created the restraint industry in 1980 and is trusted by more customers worldwide than any other brand. The GRH Series Dok-Lok® offers the most wrap in the industry and can be optimized in the future to include obstructed RIG technology.

Rotating Hooks Help Reduce Trailer Separation Accidents

Designed for the RIGs of today, the GRH's unique rotating hook helps address early departure, trailer creep and dock walk, as well as trailer tip-over from landing gear collapse or trailer up-ending.

Enhanced Hook Design

Innovative third-generation hook offers more wrap than any other design and helps to maintain engagement in below-dock endload situations

Reliable Performance

Dual articulating nose extension is standard on all 9" carriages, ensuring widest range of coverage and helps to minimize damage to the restraint when servicing lower RIGs.

Engineered to Withstand Loading Dock Environment

Hardened steel carriage is designed for impact, helps resist damage from backing trailers and stores above ground away from snow, ice, debris and standing water. IP66 rated motor helps prevent dust and water infiltration. Military grade corrosion resistant finish provides all-weather performance.

Non-Adjustable Safety

The GRH-700 is equipped with a non-adjustable motor clutch, set at the factory to help ensure that safety is never compromised because a setting is "out of adjustment."

Additional Safety Features for Future Optimization

GRH offers the opportunity for future optimization with Rite-Vu™ Hazard Recognition and Communication Systems including: interior/ exterior LED Rite-Vu™ light communication system, Approach-Vu™, Pedestrian-Vu™, Corner-Vu™, Leveler-Vu™ and Lok-Vu™. Additionally, optional Shadow Hook technology can be added to the Lok® in the future to optimize loading dock safety with obstructed RIG technology.

Industry Leading Warranty

Backed by Rite-Hite's 12-Month Limited Money-Back Guarantee of Customer Satisfaction, standard 1 year parts/labor warranty can be extended to industry-leading 2 year parts/1 year labor warranty.

Opti-Vu
BY RITE-HITE

An intuitive digital tool for data-driven decision making

More than just sensors and data, the Opti-Vu® IIoT platform monitors equipment, captures events, synchronizes vital information and facilitates data-driven behavioral and process change. *(subscription & additional hardware required)*

Specifications

General Description

The GRH-700 secures semi-trailers to a loading dock by engaging the rear impact guard (RIG) with a third generation rotating hook. Engagement range extends from 12" to 30" above the ground, with the option for a 9" or 12" carriage. A spring-loaded, structural steel housing automatically positions the unit when contacted by a backing truck. The hook mechanism is operated from a control panel mounted inside the building.

Operation

1. As the trailer backs into position, the RIG contacts the spring-loaded steel housing which rides down in a track, allowing the RIG to move over the top of the housing
2. The dock attendant pushes the lock button, activating the hook, securing the trailer to the dock with a holding force in excess of 32,000 lbs/14,500 kg. (In the event a trailer is missing, or has a damaged RIG, the Dok-Lok® restraint will communicate a fault where an audible alarm indicates that the trailer has not been properly secured. The operator may override the fault condition and secure the trailer by other means. At all times, the light communication system automatically adjusts to the proper operational mode.)
3. The restraint maintains constant contact with the RIG and adjusts automatically with trailer motion to ensure proper hooking at all times during loading/unloading operations.
4. If the hook is challenged while in operation, auto-refire technology helps to restore a safe, secure engagement.
5. When servicing is completed, the dock attendant pushes the unlock button at the control panel.

Construction

The enclosed, welded steel housing is constructed of 5/16" (8 mm) steel and is designed to receive impact of trailers backing into position. The housing protects all components from damage by weather, dirt and debris. A 1/4 HP IP66 rated motor, with flood seal available, provides dust and water infiltration protection. The GRH-700 has a military grade corrosion resistant finish. The rotating hook has a yellow dichromate finish.

Installation

The Dok-Lok® vehicle restraint is welded to a steel plate that is embedded in the dock face or secured by 15 anchor bolts plus 22" (559 mm) of weld to the pit curb angle to provide 100,000 lbs of mounting force. Modification to the dock leveler is not required.

Electrical/Controls

Mounted in an interlock capable, NEMA 4X, gasketed control panel and enclosure assembly. Hook mechanism, electric motor and switches are enclosed in structural steel housing. Electrical components and wiring are UL listed or recognized. GRH-700 restraints require a power source of: 110-120/1/60 or 208-230/1/50.
Extra length motor harness: 10' 15' 20'
Ship Controls with Restraint: Yes Dok-Commander®
Ordered Special CB Ordered CB Shipping Separately
 Existing Controls (Dok-Lok Style Light Comm. System)

Warranty

Base Controls with Standard Warranty included 1 yr parts / 1 yr labor warranty* **Opti-Vu®** Enabled Extended Warranty included 2 yr parts / 1 yr labor warranty, coded horn override, self-diagnostics & security system interface* (Warranties from date of shipment are subject to standard limitations and liability*. Add'l subscription required for **Opti-Vu®** data streaming platform. For extended warranty options, please consult local Rite-Hite® distributor.)

Interlock Options

Equipment Stored to Unlock Restraint:

- ITL (LVLR STRD/EOD) switch by Rite-Hite®
- ITL (LVLR STRD/PIT) switch by Rite-Hite®
- ITL (LVLR STRD/RHJ5/HJ22/HJ32) switch by RH®
- ITL (OHD STRD) switch by Rite-Hite®
- ITL (LVLR STRD/HDVHL) switch by Rite-Hite®
- ITL (OHD OPRTR/UNLK) switch by others
- ITL (LVLR STRD PHOTOEYE) switch by Rite-Hite®
- ITL (LVLR STRD/RHV41) switch by RH®/New Leveler
- ITL (LVLR STRD/RHV4) Field/Existing Leveler

Inside Green Light to Operate Equipment:

- ITL (APB or Comp LVLR) ITL (EOD) ITL (OHD)
- ITL (RHH/RHJ/H1-3/HV) ITL (RHV4/HDVHL)

Dok-Guardian™ Stored to Operate Restraint Engage Dok-Lok®:

- ITL (Mechanical Leveler) ITL (Photoeye)
- ITL (Powered Leveler)

▶ **Outside Truck Driver Communication System:** Flashing red or green lights and signs indicate when it is safe to back in or pull out. Signs/decals languages:

- French Canadian English (Standard)
- Portuguese Spanish

▶ **Inside Dock Attendant Communication System:**

Flashing red or green lights indicate when it is safe to perform loading/unloading operations.

▶ **Audible Alarm:** Inside alarm provides positive signal & red light when a RIG has not been properly engaged.

▶ **Audible Alarm Override:** Coded horn override allows personnel to override the audible alarm, causing inside lights to flash red and green in alternating pattern.

- Keyed Horn (NEMA 4)

Application Guidelines

All Dok-Lok® orders must include field application survey. Dok-Loks mounted directly to the dock face require a minimum 6" solid concrete wall. Consult Rite-Hite® Applications for additional mounting options.

Client Info

Company Name

Date



GRH7PKG

www.ritehite.com

8900 North Arbon Drive
Milwaukee, WI 53223, USA

P 414-355-2600 (800-456-0600)

F 414-355-9248

Please note: Unless specifically noted on quotation, all electrical, including hook-up, is the responsibility of others. Rite-Hite®, **Opti-Vu®**, Dok-Lok®, Dok-Guardian™, Rite-Vu™, Approach-Vu™, Pedestrian-Vu™, Corner-Vu™, Leveler-Vu™ and Lok-Vu™ are trademarks of Rite-Hite Holding Corporation. Rite-Hite products are covered by one or more U.S. patents with other U.S. and foreign patents pending. The information herein is provided as a general reference only regarding the use of the applicable products. The specifications stated here are subject to change. Manufactured by Rite-Hite® Products Corporation and Rite-Hite Digital Solutions

*Opti-Vu® only available in the United States