

**WHY**  
**?**

**BECAUSE KAPTIVE BEAM  
IS THE MOST COMPREHENSIVE LOAD  
OPTIMIZING SYSTEM ON THE ROAD.**

# **KAPTIVE BEAM<sup>®</sup>**

**THE DECKING SYSTEM PEOPLE ASK FOR BY NAME**

Efficient · Effective · Durable

 **KINEDYNE<sup>®</sup>**  
The Cargo Control *People!*<sup>™</sup>

## **Kaptive Beam Systems User Guide**

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# Introduction to Kaptive Beam Systems

Kinedyne Corporation’s commitment to the success of our customers is our primary focus, and continued support after installation of a Kinedyne Kaptive Beam System is critical to that success. This user guide is intended to give a comprehensive, step by step instruction on the use, and maintenance of the Kaptive Beam Systems.



**Helpful information:** throughout this guide, you will see this icon to help identify information that is valuable to the successful use of this equipment.

## Benefit

Our commitment to delivering the best performance through quality products means we have an obligation to our customers to help their employees succeed by arming them with the best tools in the business.



### Why Kaptive Beam?

In the case of your trailers, you can gain a significant competitive advantage with a fast, simple, and economical way to maximize trailer cube and increase load factor. The solution which allows you to achieve that is the Kinedyne Kaptive Beam System. This is a decking system with a series of integrated, adjustable-height deck beams, spaced throughout the trailer, which can be used to create customized load decks. Because it’s built into the trailer, the decking system vastly reduces the time and effort needed to build a load deck—increasing productivity, while giving you the flexibility to load your customers’ freight safely and securely.

## Safety

Always follow the following safety guidelines which are posted on each Kaptive Beam.

## System Components

- Tracks – The decking system is made from a series of tracks evenly distributed throughout the length of the trailer.
- Beams - On this tracking, are a series of adjustable-height **Deck Beams**. These deck beams are used to construct freight decks at any height.
- Foot Assembly - On each end of the deck beam, a secure **foot assembly** that locks the beam at the desired height.
- Beam Stops - are installed on the tracking to prevent the beams from easily sliding out of the track.
- Release Tool - A **Deck Beam Release Tool** is required to disengage the deck beam's foot assembly so that it can be raised or lowered.
- Straps - **Straps** are important parts of the decking system. **Straps** hook into the flanged tracks and are used to secure the freight to the decking system.

# Proper Use of a Kinedyne Kaptive Beam System

## Introduction to use

The Kaptive Beam system is designed to make the construction of load decks safe, fast, and convenient. To ensure that the decking system stays in working order, you must use it properly. Proper use starts with the deck beam release pole. This tool is designed to make the system safe and easy to operate.



**Always use the beam release pole to raise or lower a beam to and from the roof of the trailer. Never use a dock hook or any other object to disengage the foot assembly, or raise or lower the beam. Use of any object other than the Beam Release Bar may cause personal injury, and will likely damage the equipment.**

## Lowering a Beam

1. Use the release pole to disengage the foot assembly from the track.
2. Allow the beam to slide down the track to the desired position.
3. Then release the foot assembly

The spring loaded foot pawls will re-engage the track, securing the beam. Repeat for the opposite side. Depending on the desired height of the deck, you may need to lower each side incrementally to keep the beam from binding. Once the beam is safely within reach, you may use your hands to adjust its position on the track.

Once the beam is at the desired height, make sure both foot assemblies are fully engaged in the track and that the beam is **level** prior to loading. For beams in a double-track, you can use the release pole to lower and raise a beam individually, or by engaging both foot assemblies at the same time. When not in use, raise the beam--using the release pole--to the "store position" slots. These slots are located at the top of the tracks. When raising beams, please remember that a rolled-up trailer door is stored at the roof too. The beams near the rear of the trailer will not rise as high as the beams located in the center and nose.

Finally, after use, always return the release pole to its holder to prevent the loss of this important part.

### **Safety Note:**



For your safety--and those around you, make sure others are clear of the beam during operation. Do not raise or lower a beam while positioned directly underneath it. **NEVER** raise beams with a forklift. A forklift will damage the system, and could cause severe personal injury.

### **Building and Loading a Deck**

Proper construction of a "full deck" includes:

- Utilization of three or four deck beams (depending on trailer construction)

Once the freight is loaded on the deck, it must be secured from shifting during transit, either by using logistic straps, or a brace beam.



When working in a trailer, either on foot or on a forklift, always pay attention to the placement of beams and the clearance beneath them. Reflective labels have been placed on each beam to improve beam visibility.

When placing freight on or under a deck, always check your clearance. This includes between the deck and the floor of the trailer, AND between the deck and the beams secured at the roof of the trailer.



**1.** Never adjust deck beams when freight is loaded on them. This could cause the freight to shift position, resulting in severe injury, or even death.

**2.** Never use forklift blades to raise or lower beams. This will damage the decking system, and again, may cause the freight to fall, resulting in severe injury, or even death.

## Load Ratings

Standard beams have a dynamic working load limit (WLL) of 1,100 LBS (500KG) for decking and 1,500 LBS (680KG) shoring.

Heavy Duty beams have a dynamic WLL of 1,500 LBS (680KG) decking and 2,500 LBS (1135KGS) shoring.

### **Total pallet(s) weight supported by beams in a decking application**

3 beams – 3,300 LBS Standard Beams, 4,500 LBS Heavy Duty Beams

4 beams – 4,400 LBS Standard Beams, 6,000 LBS Heavy Duty Beams

**NOTE:** To protect against overload conditions, it is recommended that no more than 1500lbs per pallet is loaded in any given 3 or 4 beam deck position.

## Weight Distribution

While increasing your capability to utilize more of the top-half of the trailer, there **is** a greater risk of roll-overs due to the trailer's higher center of gravity.

To minimize this risk, load lighter freight on the decking system and keep heavier freight on the floor of the trailer. Always check your trailer manifest and bills to avoid overloading the trailer.

## Securing Freight

Once freight has been loaded on the deck, use a load beam or logistic strap to brace the freight and prevent it from shifting during transit.

Straps may be used when floor loading hazardous materials to secure the freight from shifting during transit and avoid freight damage.

## Proper Lane Use

Because of the ability to vary deck heights, many freight configurations which were once a hindrance, may now be progressively loaded. This flexible decking system provides a more efficient dock operation.

Due to the increased capacity benefits of this system, planning considerations must be made to utilize the logistic trailers in heavier lanes that will optimize their use. When planning, consider these increased capabilities to ensure that we are maximizing the return on our equipment.

## Maintenance of a Kaptive Beam System

### Lubrication

K1 and K2 tracks are lubricated at the factory. If there is ever a problem with the beams moving up or down, add additional lubrication. During PM, check the moving components on the head fittings and lubricate with light oil as needed.

### Inspection

Before loading a trailer, inspect the tracks for wear or damage which may cause the beams to not securely engage the track. Also, always inspect the beams for damage. Damaged beams lose structural integrity and can cause serious personal injury and damage to our customers' freight.

If beams cannot move in the tracks--or if they're bent, broken, or punctured--they must be replaced. Slightly bent, or non-punctured beams which can move freely, do not need to be replaced.

### Beam Replacement

If a beam is damaged or not working properly, the K2 Kaptive Beam System track has a machined slot at the bottom of the track (not applicable for K1 track). This slot allows you to replace the damaged beam with a fully functioning beam by simply removing the beam stop (if applicable), slide the beam to the bottom of the track, and insert a new beam in the track. **NOTE:** Ensure that you replace the beam stop after the new beam is installed.