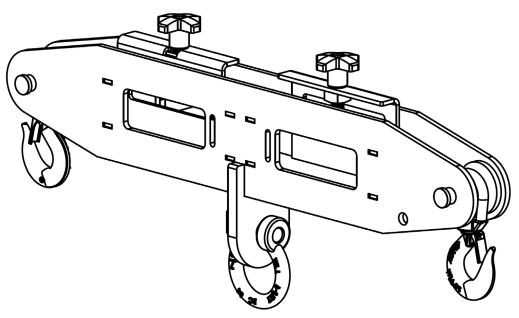




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FLB-D Series Fork Mounted Lifting Beams Instruction Manual



Receiving Instructions

After delivery, remove the packaging from the product. Inspect the product closely to determine whether it sustained damage during transport. If damage is discovered, record a complete description of it on the bill of lading. If the product is undamaged, discard the packaging.

NOTE: The end-user is solely responsible for confirming that product design, use, and maintenance comply with laws, regulations, codes, and mandatory standards applied where the product is used.

Technical Service & Replacement Parts

For answers to questions not addressed in these instructions and to order replacement parts, labels, and accessories, call our Technical Service and Parts Department at (260) 665-7586. The department can also be contacted online at http://www.vestilmfg.com/parts_info.htm.

Electronic Copies of Instruction Manuals

Additional copies of this instruction manual may be downloaded from https://www.vestil.com/page-manuals.php.

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SIGNAL WORDS

This manual uses SIGNAL WORDS to draw attention to uses of the product that could result in personal injuries, as well as the probable seriousness of those injuries. "NOTICE" alerts the reader to uses likely to result in property damage. Signal words used in this manual appear below along with the definition of each word.

A DANGER

Identifies a hazardous situation which, if not avoided, <u>WILL</u> result in DEATH or SERIOUS INJURY. Use of this signal word is limited to the most extreme situations.

▲WARNING

Identifies a hazardous situation which, if not avoided, COULD result in DEATH or SERIOUS INJURY.

ACAUTION

Indicates a hazardous situation which, if not avoided, COULD result in MINOR or MODERATE injury.

NOTICE

Identifies practices likely to result in product/property damage, such as operation that might damage the product.

SAFETY INSTRUCTIONS

Vestil strives to identify foreseeable hazards associated with the use of its products. However, material handling is dangerous and no manual can address every conceivable risk. The end-user ultimately is responsible for exercising sound judgment at all times.

WARNING

Using this device might result in serious personal injuries or death. Acquire a copy of the latest version of ANSI B56.1 ("B56.1" or the "Standard"). The Standard is freely downloadable on www.ITSDF.org. Apply all portions of Part II "For the User" that pertain to the use of attachments and removable attachments. The following recommendations are intended to complement the provisions of B56.1.

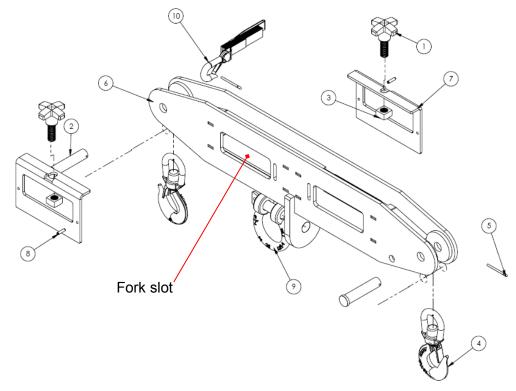
- Inspect the lifting beam before each use by applying the relevant *INSPECTION* instructions on p. #. DO NOT use the beam unless it is in satisfactory condition.
- DO NOT contact electrified wires with the lifter, load, or lift truck.
- DO NOT use the beam unless it is securely attached to the carriage of your lift truck with the safety strap. Attach the safety strap to the lift truck carriage without slack.
- DO NOT use the lifting beam if the safety strap is damaged or missing. The purpose of the safety strap is to prevent the lifter from sliding off of the forks. It is NOT intended or designed to bear the full load rating.
- DO NOT attempt to lift loads that weigh more than the beam's capacity/maximum rated load: 10,000 pounds (4,545.5kg).
- DO NOT stand, or walk, under the forks, beam, or suspended loads.
- Inform everyone in the area that you are going to use the lifting beam.
- DO NOT allow people to ride on the forks or loads suspended from the lifter.
- DO NOT use the beam if any label is damaged or missing, or not easily readable from a reasonable, safe distance. Contact Vestil to order replacement labels. See *LABELING DIAGRAM* on p. 27.
- Always make sure that threaded shackle pin of part no. 08-145-006 in the *EXPLODED VIEW* on page ## is secure before applying a load to the shackle. Tighten the shackle pin before each use.
- Before attaching a load to the beam, slightly tilt the fork lift mast towards the cab to prevent the beam from sliding towards the tips of the forks.
- ALWAYS follow the *LOADING AND USING* instructions that appear on p. 23-25. Failure to properly position a load might cause a dangerous degree of load swing when the beam is elevated.
- Only use the beam to lift loads. DO NOT use the beam to pull or drag loads.
- DO NOT transport people with the beam or allow people to ride on load items.
- Transport loads with the load as close to the ground as possible. Drive at slowly when a load is applied and brake and turn slowly and cautiously.
- DO NOT modify the beam in any way UNLESS you first obtain written approval from Vestil. Unapproved modifications automatically void the *LIMITED WARRANTY* (p. 5) and might make the beam unsafe to use.
- Whenever the beam is mounted on the forks of a lift truck, apply BOTH fork locking bolts (part no. 08-025-004 in the *EXPLODED VIEW* on p. 3) AND attach the safety strap to the fork carriage without slack.

[Continued on next page]

WARNING

- Carefully lift loads just a few inches above the ground. Confirm that the load is stable. Loads must not rotate, swing, roll, etc. DO NOT attempt to transport unstable loads. Return the load to the ground and adjust rigging as necessary to stabilize the load.
- DO NOT lift more than 1 item at a time.
- DO NOT leave suspended loads unattended. Move the load to its desired location, set it down, and disengage it from the beam.

EXPLODED VIEW AND BILL OF MATERIALS (08-006-336)



| ITEM | PART NUMBER | DESCRIPTION | QTY. |
|------|-------------|---|------|
| 1 | 08-025-004 | X-HANDLE, LOCKING BOLT | 2 |
| 2 | 33-112-023 | PIN, CLEVIS | 2 |
| 3 | 37633 | SQUARE NUT, PLAIN, ¾ - 10 UNC | 2 |
| 4 | | SPECIALTY HARDWARE, SWIVEL HOOK ("LOAD HOOK") | |
| | 08-145-050 | FLB-D-4: 1.5 TON | 2 |
| | 08-145-001 | FLB-D-6: 2 TON | 2 |
| | 08-145-002 | FLB-D-10: 3 TON | 2 |
| 5 | 65129 | PIN, COTTER, Z PLATED, 3/16 X 2 1/2 LG | 2 |
| 6 | | WELDMENT, FRAME | |
| | 08-514-369 | FLB-D-4 | 1 |
| | 08-514-369 | FLB-D-6 | 1 |
| | 08-514-346 | FLB-D-10 | 1 |
| 7 | 08-037-037 | LOCK, TENSION PLATE | 2 |
| 8 | 64247 | PIN, SPRING PIN, 1/4 X 1 LG | 2 |
| 9 | | SPECIALTY HARDWARE, SHACKLE ("LIFTING SHACKLE") | |
| | 08-145-010 | FLB-D-4: 1/2" – 2 TON | 1 |
| | 99-145-019 | FLB-D-6: 5/8" – 3 TON | 1 |
| | 08-145-006 | FLB-D-10: 7/8" – 6 ½ TON | 1 |
| 10 | 08-145-028 | FORK ATTACHMENT RESTRAINT STRAP | 1 |

NATIONAL STANDARDS

US OSHA Rule 1910.178 (29 CFR 1910.178; the "Rule") classifies this device as a (lift truck) "frontend attachment" whenever it is mounted on a lift truck. The Rule incorporates American National Standard ANSI/ITSDF B56.1 (the "Standard"). The Standard is published by the Industrial Truck Standards Development Foundation on its website (www.itsdf.org) where it is freely downloadable at http://www.itsdf.org/cue/b56-standards.html. Before putting this device into service, you must acquire a copy of the Standard. Apply all relevant parts of Part II: For the User. If instructions provided in this manual apparently conflict with the Standard, then apply the instructions in the Standard. Vestil requests that you immediately share any conflicts you discover with its TECHNICAL SERVICE personnel. Contact information for TECHNICAL SERVICE appears on the cover page of this manual.

RECORD OF SATISFACTORY CONDITION (THE "RECORD")

Record the condition of your lifting beam before putting it into service. Measure the length and width of the lifting shackle. Include a measurement of the throat opening of the shackle, i.e. the area that receives the shackle pin. Record your measurements. Measure the throat openings of both load hooks and record your measurements. Thoroughly photograph the unit from multiple angles. Include close range photos of all labeling, the lifting shackle and shackle pin, the fork channels, safety strap and hook, and the (X-handle) locking bolts (08-025-004). Collate all photographs and writings into a single file. Mark the file appropriately to identify it. The file provides a record of the device in satisfactory condition. Compare the results of all *INSPECTIONS* (see p. 5) to this *RECORD* to determine whether the unit is in satisfactory condition. If the lifter is not in satisfactory condition, repair it before returning it to service. Purely cosmetic changes, like damaged paint/powdercoat, do not constitute changes from satisfactory condition. However, touchup paint should be applied to all affected areas as soon as cosmetic damage occurs to prevent rusting and corrosion. If left unaddressed, rusting/corrosion will alter the lifter from satisfactory condition and could make it unsafe to use.

LOADING AND USING THE LIFTING BEAM

Periodically review the SAFETY INSTRUCTIONS on p. 2 and applicable content from the most recent revision of ANSI B56.1.

NOTE: Before this product may be used, U.S. Occupational Safety and Health Administration rule 1910.178(a)(4) and (a)(5) require that the beam owner/user:

- a. Obtain written approval from the manufacturer(s) of all forklifts that will use the beam [or from a professional engineer];
- b. Change capacity, operation, and maintenance instruction plates, tags, or decals accordingly; AND
- c. Mark the forklift truck to identify the beam and show the approximate weight of the truck and beam combination at maximum elevation with load laterally centered.

These requirements are published online at

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9828

Attach the Lifting Beam to the forks of your lift truck

- 1) Adjust the locations of the forks on the carriage to align with the fork slots in the beam. Center the forks on the carriage. Tilt the mast slightly towards the cab.
- 2) Slide the beam onto the forks. Wind both locking bolts (part no. 08-025-004 in EXPLODED VIEW on p. 3) clockwise until tension plates (part no. 08-037-037) solidly contact the undersides of the forks and the ends of the locking bolts tightly press against the top sides of the forks. Confirm that the beam is securely attached to the forks, for example by trying to slide the beam forward on the forks. The beam should not be able to move.
- 3) Attach the safety strap (part no. 08-145-028) to the fork carriage *without slack*. Wrap the strap around a part of the carriage and attach the hook to the strap. The safety strap is intended to prevent the beam from sliding off of the forks. DO NOT use it as load rigging. Attach the hook at the end of the safety strap to the carriage or the safety strap.

Loading the Beam

Capacity figures are provided on label 1000 (see *LABELING DIAGRAM* on p. 6) in both pounds and kilograms. It indicates the net capacity of the hook in pounds. The capacity is also displayed on tag 023 (see "Labeling Diagram" below).

Connect the load to the FLB in a manner that minimizes load swing when it is lifted off of the ground. Swinging loads might cause injuries and/or could damage equipment.

INSPECTIONS

Inspections and repairs should only be performed by qualified persons. Compare the results of each inspection to the *RECORD OF SATISFACTORY CONDITION* (the "RECORD"). Do not use the lifter unless all parts are in satisfactory condition. Replace parts that are not in satisfactory condition before using the lifter again. **DON'T GUESS! If you have any questions about the condition of your lifter, speak with** *TECHNICAL SERVICE personnel***. The phone number is provided on the cover page of this manual.** *Never make temporary repairs of damaged or missing parts***. Only use manufacturer-approved replacement parts. Deformities, cracks, and severe wear of the frame weldment require immediate replacement of the entire unit.**

If you determine that any part of the lifting beam is not in satisfactory condition, restore the beam to satisfactory condition BEFORE using it again.

- 1. **Before each use** Visually examine the beam for cracks, severe rusting/corrosion, damaged hooks and/or shackle, and damaged safety strap or its snap hook.
- 2. **Monthly inspection** At least once per month, and before using the beam for the first time, inspect the following components for conditions that might interfere with normal operation.

<u>Frame weldment and tension plates</u>: Fork slots should be square and solid. The tension plates should be able to move up-and-down but should be prevented from sliding free of the frame weldment by spring pins (64247). Excessive wear or damage (or indications of metal fatigue) to any portion of the fork pockets, support frame, beam or beam sleeve.

<u>Safety strap</u>: Closely examine the strap and the snap hook at the free end of the strap. Check the strap for thinned, frayed, torn, or significantly worn areas. The snap hook at the end of the strap should return to the closed position automatically.

<u>Lifting hooks and clevis pins</u>: Examine both hooks. Record the measurement of the throat opening of each hook and compare the measurements with those in the *RECORD*. Replace a hook if its throat opening is more than 15 percent wider than the original throat opening measurement, or if the hook is twisted more than 10° from the plane of the unbent hook. Hook latches should close automatically. Examine clevis pins (33-112-023) and cotter pins that attach the hooks to the frame. Immediately replace a clevis pin that is bent, cracked, and/or deformed or damaged in any way.

<u>Lifting shackle</u>: Examine the shackle. Measure the throat opening. Compare the measurement with the measurement in the *RECORD*. Tighten the shackle pin. The shackle should be securely attached to the underside of the frame. Immediately replace the shackle if it, or the shackle pin, is cracked, warped, or significantly worn.

<u>Locking bolts</u>: Each locking bolt winds into a square nut under the top of a tension plate. Make sure that each bolt winds through its square nut. Mount the beam on the forks of your lift truck. Confirm that you can bring the end of each bolt into solid contact with the top surface of each fork. Doing so should also cause each tension plate to firmly press against the underside of the corresponding fork.

<u>Labeling</u>: The product should always be labeled substantially as shown in the <u>LABELING DIAGRAM</u> on p. 6. Replace any label that is damaged, significantly faded, or not easily readable from a reasonable distance.

MAINTENANCE

Implement a maintenance program to ensure that the beam remains in normal operating condition. The following steps should be utilized in conjunction with maintenance procedures applicable to fork truck attachments provided in the most recent edition of ANSI B56.1.

- Step 1: Tag the beam, "Out of Service."
- Step 2: Remove dirt and other matter from all surfaces.
- <u>Step 3</u>: Conduct a *Monthly inspection* (see p. 5). If severe deformities, corrosion, rusting, or excessive wear of structural members is found, immediately and permanently remove the device from service.
- Step 4: Perform all necessary adjustments, replacements and/or repairs but DO NOT modify the beam.

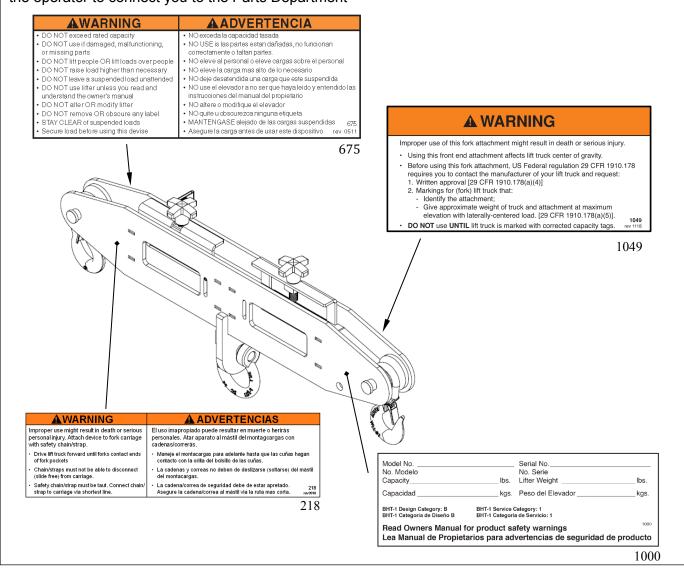
▲ WARNING

DO NOT return the lifter to service until all necessary adjustments and repairs are complete. An adjustment is a simple correction that restores the beam to <u>SATISFACTORY CONDITION</u>, such as tightening loose fasteners or removing debris from surfaces. Repair means removal of worn parts and installation of replacement parts. A "modification" is a change that <u>alters the beam from original condition</u>, like bending the structural members or removing parts. <u>NEVER</u> modify the beam without the express, written approval of Vestil. Modifications might make the beam unsafe to use and automatically void the <u>LIMITED WARRANTY</u>.

Step 5: Make a dated record of all repairs, adjustments, and replacements performed.

LABELING DIAGRAM

The unit should be labeled as shown in the diagram. However, label content and locations are subject to change so your product might not be labeled exactly as shown. Replace all labels that are damaged, missing, or not easily readable (e.g. faded). To order replacement labels, contact the *TECHNICAL SERVICE AND PARTS DEPARTMENT* online at http://www.vestilmfg.com/parts info.htm. Alternatively, you may request replacement parts and/or service by calling (260) 665-7586 and asking the operator to connect you to the Parts Department



LIMITED WARRANTY

Vestil Manufacturing Corporation ("Vestil") warrants this product to be free of defects in material and workmanship during the warranty period. Our warranty obligation is to provide a replacement for a defective, original part covered by the warranty after we receive a proper request from the Warrantee (you) for warranty service.

Who may request service?

Only a warrantee may request service. You are a warrantee if you purchased the product from Vestil or from an authorized distributor AND Vestil has been fully paid.

Definition of "original part"?

An original part is a part used to make the product as shipped to the Warrantee.

What is a "proper request"?

A request for warranty service is proper if Vestil receives: 1) a photocopy of the <u>Customer Invoice</u> that displays the shipping date; AND 2) a <u>written request</u> for warranty service including your name and phone number. Send requests by one of the following methods:

US Mail Fax Email
Vestil Manufacturing Corporation (260) 665-1339 info@vestil.com

2999 North Wayne Street, PO Box 507 Phone Enter "Warranty service request"

Angola, IN 46703 (260) 665-7586 in subject field.

In the written request, list the parts believed to be defective and include the address where replacements should be delivered. After Vestil receives your request for warranty service, an authorized representative will contact you to determine whether your claim is covered by the warranty. Before providing warranty service, Vestil will require you to send the entire product, or just the defective part (or parts), to its facility in Angola, IN.

What is covered under the warranty?

The warranty covers defects in the following original, dynamic parts: motors, hydraulic pumps, motor controllers, and cylinders. It also covers defects in original parts that wear under normal usage conditions ("wearing parts"), such as bearings, hoses, wheels, seals, brushes, and batteries.

How long is the warranty period?

The warranty period for original dynamic components is <u>1 year</u>. For wearing parts, the warranty period is <u>90 days</u>. Both warranty periods begin on the date Vestil ships the product to the Warrantee. If the product was purchased from an authorized distributor, the periods begin when the distributor ships the product. Vestil may, at its sole discretion, extend a warranty period for products shipped from authorized distributors by up to 30 days to account for shipping time.

If a defective part is covered by the warranty, what will Vestil do to correct the problem?

Vestil will provide an appropriate replacement for any *covered* part. An authorized representative of Vestil will contact you to discuss your claim.

What is not covered by the warranty?

The Warrantee (you) is responsible for paying labor costs and freight costs to return the product to Vestil for warranty service.

Events that automatically void this Limited Warranty.

- Misuse;
- Negligent assembly, installation, operation or repair;
- Installation/use in corrosive environments;
- Inadequate or improper maintenance;
- Damage sustained during shipping;
- Collisions or other accidents that damage the product;
- <u>Unauthorized modifications</u>: Do not modify the product IN ANY WAY without first receiving written authorization from Vestil.

Do any other warranties apply to the product?

Vestil Manufacturing Corp. makes no other express warranties. All implied warranties are disclaimed to the extent allowed by law. Any implied warranty not disclaimed is limited in scope to the terms of this Limited Warranty. Vestil makes no warranty or representation that this product complies with any state or local design, performance, or safety code or standard. Noncompliance with any such code or standard is not a defect in material or workmanship.



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