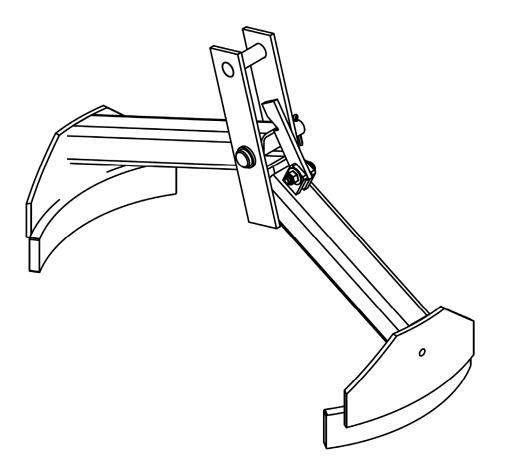


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DCL-Series Drum Carriers Instruction Manual



Receiving instructions:

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

Notes:

- 1) Compliance with laws, regulations, codes, and non-voluntary standards enforced in the location where the product is *used* is exclusively the responsibility of the end-user.
- 2) VESTIL is **not responsible** for injury or property damage that results from failure to apply the instructions in this manual or information that appears on labeling.

Table of Contents: Signal Words 2 Usage Recommendations 2 Specifications 3 FIG. 1: DCL-550 exploded parts diagram & bill of materials 4 FIG. 2: DCL-1000 exploded parts diagram & bill of materials 4 Using the drum carrier 5-6 Inspections & Maintenance 6 Labeling Diagram 6 Limited Warranty 7

Signal Words:

This manual uses SIGNAL WORDS to indicate the likelihood of personal injuries, as well as the probable seriousness of those injuries, if the product is misused in the ways described. Other signal words call attention to uses of the product likely cause property damage. Signal words that appear in this manual are defined below.

A DANGER

Used to identify a hazardous situation which, if not avoided, <u>WILL</u> result in DEATH or SERIOUS INJURY. DANGER is limited to the most extreme situations.

AWARNING

Used to identify 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.

Usage Recommendations:

Vestil strives to identify hazards that could arise during the use of its products. However, material handling is dangerous and no manual can address every conceivable risk. The most effective way to avoid injury is for the user to exercise sound judgment whenever using this product.

AWARNING Improper or careless use of this product might result in death or serious personal injury.

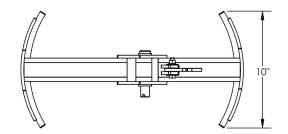
- DO NOT assemble, use, or service the product until you have read and understand the entire manual. Read the manual to refresh your understanding of proper use and maintenance procedures whenever necessary.
- DO NOT attempt to resolve any issue with the product unless you are qualified to do so and <u>certain</u> that it will be safe to use afterwards. If improperly maintained, this product might become unsafe to use.
- Review instruction manuals for your crane, hoist and any other equipment used in conjunction with the drum carrier.
- Inspect the drum carrier before each use. DO NOT use the device unless it is in normal operating condition! If the unit is damaged, tag the unit "Out of Service" and report the damage to maintenance personnel. DO NOT use the carrier until it is restored to normal condition.
- This device is designed to carry drums. DO NOT try to lift or carry any load other than drums with the carrier. ALWAYS verify that the drum is securely gripped before carrying the drum to a new location. Follow the "Step 5" instructions on p. 4 to confirm that the connection is secure.
- DO NOT leave an elevated drum unattended. Lower and disengaged the drum before leaving it unattended: 1) lower the drum until it is supported completely by the ground/floor; 2) disconnect the drum-gripping arms from the drum; and then 3) move the hoist and carrier away from the drum.
- DO NOT alter the carrier from its original configuration unless you first receive written authorization to do so from Vestil. Unauthorized modifications might make the drum carrier unsafe to use. If injuries and/or property damage occurs AFTER modifying (altering from original form) the product without authorization from Vestil, fault belongs exclusively to the person who modified the product.
- DO NOT lift a drum by engaging any drum surface feature other than the top rim/chime. ONLY attach the carrier to the top rim of a drum. DO NOT attempt to lift or transport a drum if the rim is damaged or rusted because the drum might tear loose when the lifter is raised.
- DO NOT lift more than 1 drum at a time.
- DO NOT lift a drum lying on its side.
- DO NOT sit on or apply any weight/pressure to a suspended drum.
- <u>DO NOT attempt to lift a drum that weighs more than the rated load of the carrier</u>. ALWAYS make sure that the net weight of the drum does not exceed the rated load of the carrier.
- DO NOT lift a load higher than necessary. (See "Use Instructions" on p. 4-5).
- DO NOT raise the load over your feet or any other part of your body.
- DO NOT use the carrier to lift a drum over people or to lift any apparatus that supports people, such as a work platform. The lifter is designed <u>ONLY</u> to lift 30 and 55 gallon drums.
- DO NOT get in front of or behind a suspended load while moving it. Stand to the side of a suspended load (drum), and watch the load at all times. You are less likely to be injured if the load remains within your sight at all times.

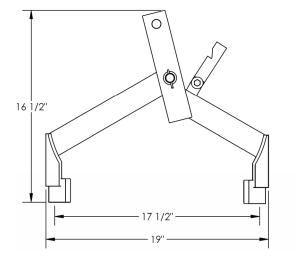
NOTICE To maximize the service life of the drum carrier:

- Use only replacement parts supplied or approved by the manufacturer.
- ALWAYS store the DCL in a dry location that shelters it from the elements. If necessary, elevate the carrier by storing it on a pallet, storage rack, etc. to prevent damage that might occur if contact with water or corroding liquids occurs.
- Maintain the product as suggested in "Maintenance & Inspections" on p. 6-7.

Specifications:

Dimensions and other specifications for each DCL series drum gripper appear in the diagrams below.





DCL-550:

Capacity = 1,000 lb.

= 10" Overall width

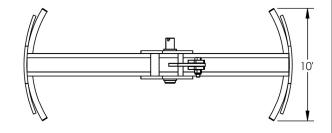
Usable width = 10" Overall length = 19"

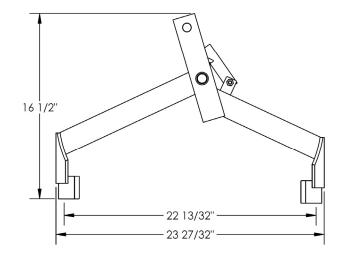
Usable length = $17^{1}/_{2}$ "

Overall height = $16^{1}/_{2}$ "

Net weight = 21.9 lb.

Accepts 30 gallon steel drums





DCL-1000:

Capacity = 1,000 lb.

= 10" Overall width

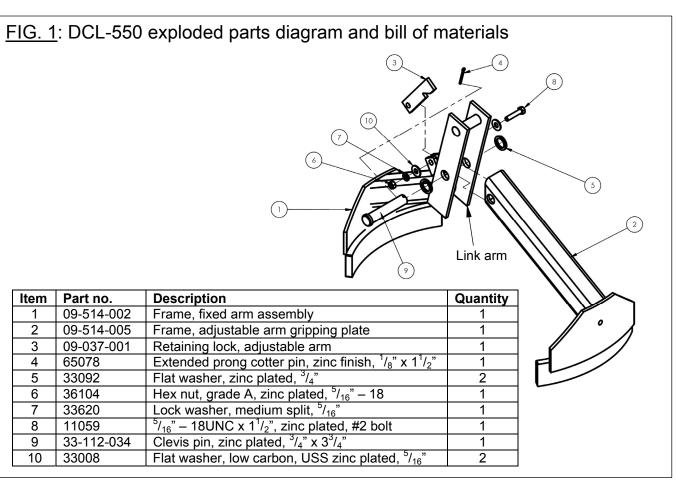
Usable width = 10"

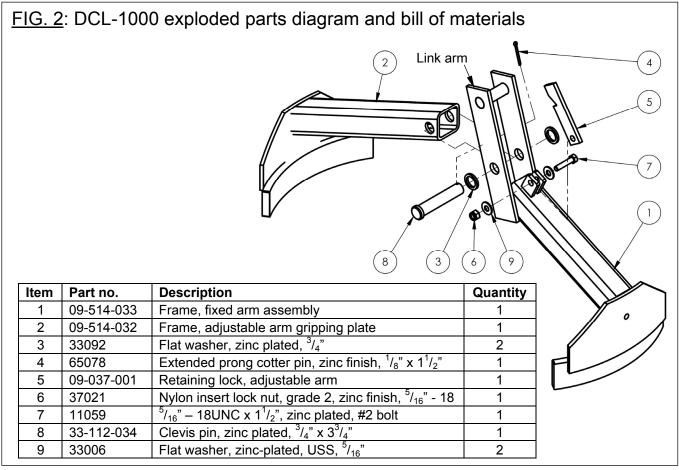
Overall length = $23^{27}/_{32}$ " Usable length = $22^{13}/_{32}$ "

Overall height = $16^{1}/_{2}$ "

Net weight = 23.4 lb.

Accepts 50 gallon steel drums





Using the drum carrier:

DCL-series drum carriers are "below-the-hook" (BTH) lifting devices. The American National Standard ASME B30.20 provides suggestions for using and maintaining BTH devices. Vestil suggests that you acquire a copy of ASME B30.20 and apply the appropriate use and maintenance recommendations. Instructions in this manual are intended to <u>supplement</u> the recommendations in the standard.

<u>Step 1</u>: Inspect the drum and the carrier. Remove all debris built up around the rim of the drum that might interfere with or prevent the drum carrier from securely engaging the rim. Visually inspect the carrier to confirm that all parts are in normal operating condition.

<u>Step 2</u>: Connect the carrier to a hoist or fork truck tine. Connect the carrier to a safety hook (hook with a spring loaded latch) to prevent accidental detachment from the hoist.

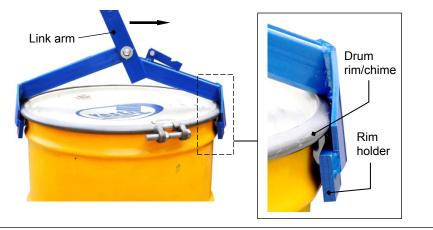
<u>Step 3</u>: Position the carrier above the drum. Open the arms and lower it over the top of the drum. The rim holders must be below the rim of the drum.

NOTE: The drum must be in an upright position for the carrier to properly engage the rim. DO NOT attempt to lift a drum lying on its side because the drum will swing as it rises above the ground. The swinging motion could cause serious injuries.



<u>Step 4</u>: Pivot the link arm in the direction of the arrow shown below to draw the arms against the side of the drum. Then, raise the hook sufficiently to remove slack from the hoist chain/cable and apply the arm lock.

Rim / holder





<u>Step 5</u>: Stand to the side of the drum and raise it just **a few inches above the ground** to test the contact between the rim and the carrier. Verify that the carrier has an adequate grasp on the rim. If the connection needs to be improved, return the drum to the ground and adjust the connection.

AWARNING DO NOT attempt to lift or transport a drum with the DCL if a secure grasp on the rim cannot be achieved, e.g. the rim is so damaged that the rim holders cannot make reliable contacts with it. If the carrier cannot securely grasp the rim, use a different lifting device to lift and move the drum.

Step 6: Transport the drum. Follow sub-step A or B below as appropriate.

- A. Overhead hoist and trolley: Lift the drum no higher than 5-6 inches above the ground. Stand to the side of the drum (not in front or behind). Walk slowly while moving the load to the desired location.
 - 1. Make sure that your clothing, feet, and all other parts of your body stay out from underneath the drum and do not become tangled in the carrier, chain/cable, etc.
 - 2. The drum must swing as little as possible when suspended by the carrier and while being moved to the desired location. Walk slowly (manual trolley) or select a slow movement rate (powered trolley) to avoid making the drum swing.

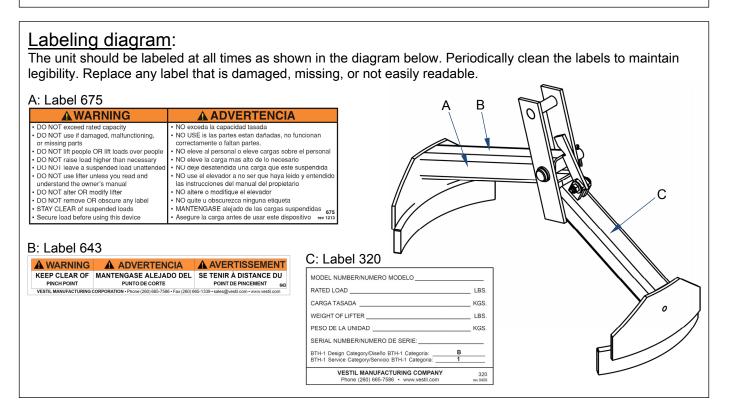
- B. <u>Forklift</u>: slowly drive the forklift to the desired location and adjust the driving speed to minimize the degree of drum swing.
 - 1. The drum will swing more significantly the greater the driving speed. Drive slowly to minimize the drum's movement during transport.
 - 2: The drum will tend to swing opposite the direction of a turn and will swing out in front of the forklift during braking. Apply the brakes gradually and reduce speed during all turns to reduce the effect on the suspended drum.

<u>Step 7</u>: Make sure that the drum is not swinging or rotating. Slowly lower the drum until slack is created in the hoist chain. Unlock the arms, disengage them from the drum rim, and lift the carrier away from the drum. You might need to increase the amount of slack in the hoist chain to allow the carrier sufficient freedom of movement to disengage the rim.

Maintenance:

Regular maintenance is necessary to keep the carrier in normal operating condition. If a problem is discovered during an inspection, restore the drum carrier to normal operating condition BEFORE returning it to service. Only use manufacturer-approved replacement parts.

- Step 1: Tag the unit, "Out of Service."
- Step 2: Remove any dirt or other matter from all surfaces.
- Step 3: [Refer to the exploded parts diagrams on p. 4.]
 - a. Fasteners (hardware): Bolts, nuts, washers, clevis pin, and cotter pin
 - b. Arm weldments and link arm: confirm that each arm is structurally sound. Neither arm should be cracked, warped, bent, etc. The arms should be free of corrosion and rust.
 - c. Welds: confirm that all welds are intact. Particularly inspect the welds joining rim holders to the arms.
 - d. Pivot points: Lubricate the pivot point between the clevis pin and link arm periodically. Examine the pivot point and confirm that there is no metal fatigue around the pin holes (in the link arm).
 - e. Overall condition of drum carrier: the structure should be clean, square and rigid, and free of rust and corrosion. Remove dirt and debris. Do not use the carrier if the supporting frame is severely worn or rusted or if one or both ratchet straps are torn or otherwise damaged.
- <u>Step 4</u>: Perform all other necessary adjustments and repairs. Use only manufacturer-approved replacement parts. DO NOT modify the carrier, i.e. never alter it from its original configuration.
- Step 5: Make a dated record of any repairs, adjustments, and replacements.



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 if the part is 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.

What is an "original part"?

An original part is a part <u>used to make the product as shipped</u> 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 any of the following methods:

MailFaxEmailVestil Manufacturing Corporation(260) 665-1339sales@vestil.com2999 North Wayne Street, PO Box 507PhoneAngola, IN 46703(260) 665-7586

In the written request, list the parts believed to be defective and include the address where replacements should be delivered.

What is covered under the warranty?

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 may require you to send the entire product, or just the defective part or parts, to its facility in Angola, IN. The warranty covers defects in the following <u>original dynamic components</u>: motors, hydraulic pumps, electronic controllers, switches and cylinders. It also covers defects in <u>original</u> parts that wear under normal usage conditions ("<u>wearing parts</u>"), such as bearings, hoses, wheels, seals, brushes, and batteries.

How long is the warranty period?

The warranty period for original dynamic components is <u>30 days</u>. For wearing parts, the warranty period is <u>30 days</u>. The warranty periods begin on the date when 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 the warranty periods 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?

- 1. Labor;
- 2. Freight:
- 3. Occurrence of any of the following, which automatically voids the warranty:
 - Product misuse;
 - Negligent operation or repair;
 - Corrosion or use in corrosive conditions;
 - Inadequate or improper maintenance;
 - Damage sustained during shipping;
 - · Accidents involving the product;
 - <u>Unauthorized modifications</u>: DO NOT modify the product IN ANY WAY without first receiving written authorization from Vestil. Modification(s) might make the product unsafe to use or might cause excessive and/or abnormal wear.

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

