

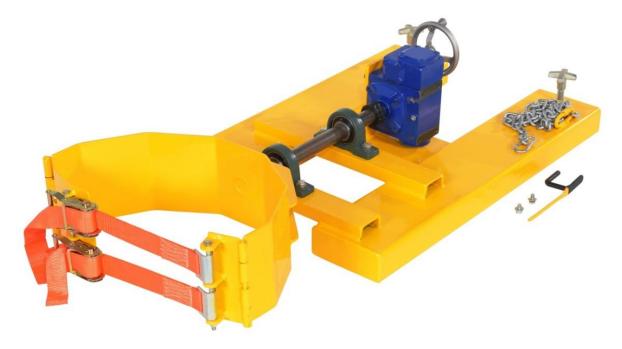
VESTIL MANUFACTURING COMPANY

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DCR-RAR-12 Fork-Mounted Right Angle Drum Rotator



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 https://www.vestil.com/page-parts-request.php.

Electronic copies of Instruction Manuals

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

Table of Contents	Paç
Specifications	2
Signal Words	2
Safety Instructions	2 -
Exploded View and Bill of Materials	3
Center of Gravity Diagrams	4
Using the Lifter	4 -
Record of Satisfactory Condition	6
Inspections & Maintenance	
Labeling Diagram	
Limited Warranty	8

SPECIFICATIONS

Specifications documents for DCR-RAR-12 drum carriers are provided on Vestil's website. To access the appropriate specifications document, navigate to this webpage: https://www.vestil.com/product.php?FID=1718. Click the "Product Specifications Table" drop-down menu bar partway down the page. Scroll down to the entry for the model you purchased and click the button in the column titled "PDF's" that looks like a pencil inside a box. A PDF file will open. This file is the specifications document. Print a copy of the document and keep it with your copy of this manual. The following is an exemplar specifications document.

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. The following are signal words used in this manual and their definitions.

▲ DANGER

▲ WARNING

▲ CAUTION

NOTICE

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.

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

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

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, no manual can address every conceivable risk. The most effective way to avoid injury is to exercise sound judgment when assembling, using, inspecting, and maintaining this crane.

A WARNING

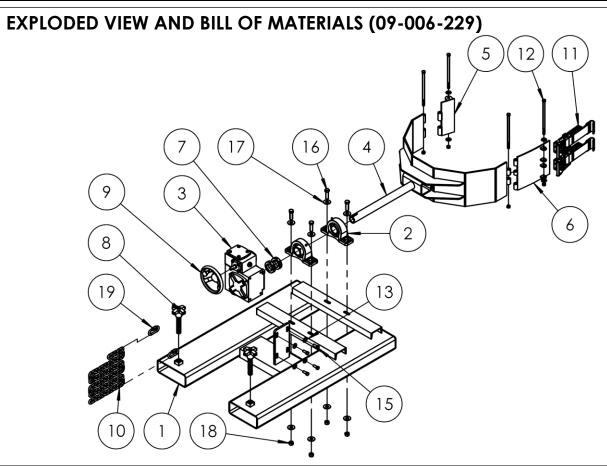
Risks of serious personal injuries or death.

- DO NOT use, inspect, or service this product until you read and understand the entire instruction manual. Read the manual whenever necessary to refresh your understanding of its contents. Also apply all relevant provisions of the most recent revision of ANSI/ITSDF B56.1 "Safety Standard for Low Lift and High Lift Trucks" and all laws, regulations, codes, etc. that apply to lift truck attachments where the device is used. If any instruction in this manual conflicts with the Standard, then you should apply the provision in the Standard.
- DO NOT disconnect a drum from the drum carrier until the load is entirely and stably supported by the ground or other surface.
- Inspect the device as instructed in <u>INSPECTIONS AND MAINTENANCE</u> on p. 6. Acquire a copy of the most recent revision of <u>ANSI/ITSDF B56.1</u>. Apply inspection procedures relevant to lift truck attachments.
- Maintain the device according to the <u>INSPECTIONS & MAINTENANCE</u> instructions. **These procedures** <u>supplement</u> the maintenance recommendations of ANSI/ITSDF B56.1 (the "Standard"). DO NOT use the device unless it is in <u>SATISFACTORY CONDITION</u> (p. 6).
- ALWAYS attach the safety chain to the carriage of your lift truck without slack. The drum carrier must not be able to slide forward on the forks while in use.
- DO NOT service the device unless you are qualified to do so. Contact <u>TECHNICAL SERVICE</u> (contact information on cover page) if you are uncertain whether the drum carrier should be used.
- DO NOT use this lifter to pull/drag loads. ONLY use the device to lift, transport, and rotate intact drums.
- DO NOT lift people or allow people to sit, or ride, on the drum carrier.
- DO NOT attempt to lift or transport a drum unless both ratchet straps are applied. Tighten the straps until the drum is firmly grasped by the drum cradle.
- DO NOT use this attachment to lift (or move) a drum that is damaged or structurally unsound.
- DO NOT attempt to lift a load that weighs more than the capacity of the carrier OR the lift truck, whichever is smaller. The capacity of your drum carrier appears on label 1153. The label is attached to the product as shown in the <u>LABELING DIAGRAM</u> on p. 7.

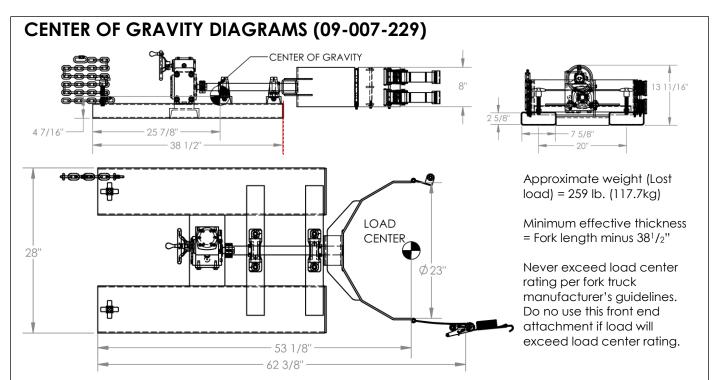
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WARNING

- DO NOT elevate a drum more than a few inches above the ground except as necessary to avoid contact with objects in or along the path of travel or as required to utilize the dumping/rotation feature to empty drum contents.
- DO NOT leave an elevated drum unattended. Land the drum before leaving it.
- DO NOT raise a drum over people or allow anyone to stand or reach beneath a suspended drum.
- DO NOT modify this product in any way without first obtaining written approval from Vestil. Unapproved modifications automatically void the <u>LIMITED WARRANTY</u> on p. 8 and might make the product unsafe to use.
- Transport drums slowly. Start and stop gradually. Avoid rough terrain when transporting drums.
- DO NOT use the drum carrier unless all labeling applied to it is in place, easily readable, and undamaged. See <u>LABELING DIAGRAM</u>, p. 7.



Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	09-514-195	WELDMENT, FRAME, BASE	1	11	16-145-018	2" x 36" STRAP WITH RATCHET	2
2	99-110-003	BEARING, PILLOW BLOCK, UCP208	2	12	11129	HEX BOLT, GRADE A, ZINC FINISH, 3/8"- 16 X 8"	4
3	09-141-001	REDUCER, GEAR	1	13	33008	FLAT WASHER, LOW CARBON, USS, ZINC PLATED, 3/8"	8
4	09-514-196	WELDMENT, FRAME, CRADLE	1	14	36106	HEX NUT, GRADE A, ZINC PLATED, 3/8- 16	4
5	09-516-105	WELDMENT, BRACKET, STRAP HOOK	1	15	11105	HEX BOLT, GRADE A, ZINC PLATED, 3/8"-16 X 1"	4
6	09-516-106	WELDMENT, BRACKET, STRAP	1	16	11210	HEX BOLT, GRADE A, ZINC FINISH, 1/2"-13 X 1 3/4"	4
7	09-045-031	SET SCREW SHAFT COLLAR	2	17	33012	FLAT WASHER, LOW CARBON, ZINC FINISH, 1/2"	8
8	08-025-008	4-HANDLE BOLT, 4 INCH (TINE LOCK BOLT)	2	18	36110	HEX NUT Z-PLATED, Ø 1/2 - 13	4
9	16-145-006	SPECIALTY HARDWARE, HAND WHEEL	1	19	99-145-053	5/16" QUICK LINK	1
10	09-145-018	CHAIN, 5/16" x 56" LG	1				



Horizontal center of gravity (HCG): $25^7/8$ inches (~65.7 cm) from the open ends of the fork pockets and $12^5/8$ " inches (32.1cm) from the outermost edges of the fork pockets (red dotted line in first graphic above).

Vertical center of gravity: 47/16 inches (~11.3 cm) from the bottom of the fork pockets.

NOTE: Documents that provide specifications for DCR-RAR series drum carriers are available on Vestil's website (www.vestil.com). Specifications include dimensions, net weight, and capacity information. To access the appropriate specifications document, navigate to this webpage: https://www.vestil.com/product.php?FID=1718. Click the *Product Specifications Table* tab. Scroll the page to the entry for the model you purchased, and click the button in the *PDF* column that looks like a pencil inside a box. A PDF file will open. This file is the specifications document for your dock leveler. Print a copy of the document and keep it with your copy of this manual.

NATIONAL STANDARDS

According to US Federal Occupational Safety and Health Administration (OSHA) Rule 1910.178 (29 CFR 1910.178; the "Rule"), this device is a front end attachment for a lift truck whenever it is mounted on the forks of a lift truck. The Rule incorporates American National Standard ANSI/ITSDF B56.1 (the "Standard") published by the Industrial Truck Standards Development Foundation (ITSDF) on its website (www.itsdf.org). The standard is freely downloadable at http://www.itsdf.org/cue/b56-standards.html. Before putting this drum carrier into service, you must acquire a copy of the Standard. Apply all relevant parts of Part II: For the User. If instructions in this manual conflict with instructions in the Standard then the instructions in the Standard should be applied. Please contact our TECHNICAL SERVICE department if you believe that these instructions conflict with the Standard. Contact information for TECHNICAL SERVICE appears on the cover page of this manual.

USING THE LIFTER

- <u>Step 1</u>: Adjust the positions of the forks on the carriage (of your lift truck) to align with the fork pockets of the drum carrier.
- <u>Step 2</u>: Mount the drum carrier on the forks of your lift truck by slowly driving forward until the forks contact the ends of the pockets.
- <u>Step 3</u>: Attach the safety chain to the fork carriage. Wrap the chain around the carriage. Fasten the quick link to the chain **without slack**. The chain must not be able to disconnect from the carriage during use, e.g. slide off of the carriage. Tighten the tine lock bolts (08-025-008) against the tines.

AWARNING

Improper use of this fork attachment could result in death or serious injury.

- The chain is an essential safety-enhancing feature. Wrap the chain around the carriage and fasten the quick link—attached to the free end of the chain—to a link of the chain with no slack. The chain will not prevent the drum lifter from sliding off of the forks if it is improperly connected to the fork carriage.
- Using this device affects lift truck center of gravity. Before using the lifter, US Federal regulation 29 CFR 1910.178 requires you to contact the manufacturer of your lift truck and request: 1) Written approval; 2) Markings for the lift truck identifying the attachment and provide the approximate weight of truck and attachment at maximum elevation with load laterally-centered. **DO NOT** use this lifter **UNTIL** your lift truck is marked with corrected capacity tags.

<u>Step 4</u>: Drive to the drum that must be moved. Drive forward and engage the drum with the drum cradle. Adjust the elevation of the forks so that the upper edge of the drum cradle engages the bottom of the upper drum ring.

<u>Step 5</u>: Apply the ratchet straps. Release the straps and wrap them around the drum. Attach the strap hooks to the hook bolts. Release the ratchet to extend the straps.

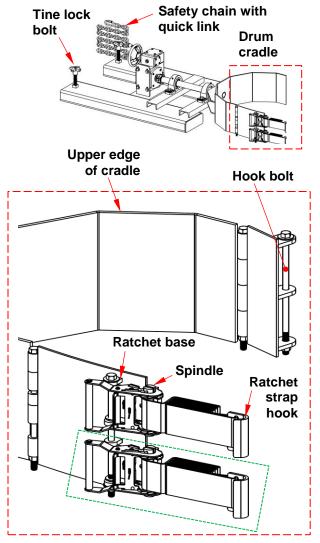
- A. Release the ratchet.
 - i. Pull the release lever up (toward the handle).
 - ii. While holding up the release lever, pivot the handle away from the ratchet base (approximately 180 degrees).
 - iii. Pull the strap to unwind it from the spindle.
- B. Secure the drum in the cradle with both straps.
 - i. Wrap the straps around the outside of the drum.
 - ii. Attach the ratchet strap hooks to the hook bolts.
 - iii. Pull the release lever up. Move the ratchet handle back towards the base and let go of the release lever.

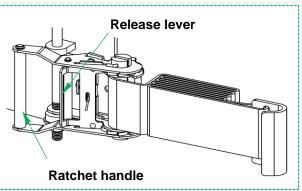
Move the handle of each ratchet strap back-and-forth to tighten the strap against the drum. Both straps must firmly press the drum against the back of the cradle. The drum should not be able to move after the straps are tightened.

<u>Step 6</u>: Slowly raise the forks until the drum is elevated a few inches above the floor. Make sure that the lift truck mast is slightly tilted back (towards the cab of the lift truck). Transport the drum to the dumping site. Drive carefully. Reduce speed while turning. Apply brakes gradually.

<u>Step 7</u>: Dump the contents of the drum. Level the forks. Turn the hand wheel clockwise to tilt the drum to the right. Turn the hand wheel counterclockwise to tilt the drum to the left.

<u>Step 8</u>: Transport the empty drum to the offloading site. The mast should be slightly tiled back. At the offloading site, level the forks. Slowly lower the forks until the drum rests on the floor. Release the ratchet straps. Back away from the drum and transport the drum carrier to its storage site.





RECORD OF SATISFACTORY CONDITION (THE "RECORD")

Before putting the drum carrier into service, record its condition. Thoroughly photograph the unit from multiple angles. Take close-range photographs of the drum cradle, ratchet straps, the labels, all pivot points, the safety chain and quick link, and tine lock bolts. Use the lifter to lift a drum. Describe how the drum carrying mechanism engages the drum. Describe all sounds produced by the carrier while loaded. Collect all photographs and writings in a file. Mark the file appropriately to identify it. Compare the results of all inspections to this RECORD to determine whether the carrier is in satisfactory condition. Do not use the carrier unless it is in satisfactory condition. Purely cosmetic changes, like damaged paint or powdercoat are not changes from satisfactory condition. However, touchup paint should be applied to all affected areas as soon as the finish is damaged.

INSPECTIONS & MAINTENANCE

Compare the results of all inspections to the <u>RECORD</u> to determine whether a component is in satisfactory condition or requires repair or replacement.

A. Before each use inspect the following components:

- 1. Safety chain and quick link: Confirm that the quick link opens and closes properly.
- Labels: All labels must be easily readable. Each label should be located where indicated in the <u>LABELING DIAGRAM</u> on p. 7. If a label is unreadable or missing, contact the <u>TECHNICAL SERVICE</u> <u>AND PARTS DEPARTMENT</u> to order a replacement.
- B. At least once every 2 weeks inspect the carrier to confirm satisfactory condition. Do not return it to service unless/until it is in satisfactory condition.
 - 1. Fasteners (hardware) and hand chain:
 - Bolts, nuts, washers, and snap hooks: Tighten loose fasteners.
 - Safety chain, cold shut, and quick link: Inspect the cold shut (link welded to a fork pocket; one end of the safety chain attaches to it), quick link, and all links of the safety chain for breaks, cracks, elongations, severe wear, rusting and corrosion, and other forms of damage. The cold shut should be solidly welded to the fork pocket. Confirm that the quick link opens and closes normally.
 - 2. <u>Fork pockets</u>: Confirm that each pocket is structurally sound. In particular, examine the underside of the each pocket for rust and corrosion.
 - 3. Welds: All welds are intact. Check them and the metal surrounding welds for damage.
 - 4. <u>Drum carrying/rotating assembly (cradle, hand wheel, reducer gear, ratchets and straps)</u>: Rotate the hand wheel clockwise and counterclockwise. Confirm that the cradle rotates properly. Examine the ratchets and ratchet straps. Examine the straps for cuts, tears, and areas of significant wear. Examine the strap hooks (at the free ends of the ratchet straps). Hooks must not be bent or cracked. Inspect all parts of the cradle for cracks, rusting/corrosion, and other forms of damage. Confirm that hinges operate normally. Lubricate the hinges. Lubrication might have to be applied more frequently under heavy usage conditions.
 - 5. <u>Drive train, chain sprocket, & pivot points</u>: Rotate the drum saddle to confirm normal operation of the drive train and chain wheel. Lubricate pivot points and drive gears.
 - 6. <u>Frame</u>: The structure should be clean, square and rigid, and free of rust and corrosion. Clean the frame with a mild soap and water solution.

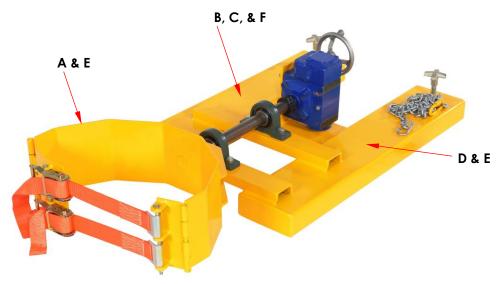
Maintenance

NOTICE Proper use, maintenance, and storage are essential for this product to function properly.

- ONLY install replacement parts supplied or approved by the manufacturer.
- ALWAYS store this product in a dry location. If necessary, elevate the carrier by storing it on a pallet, storage rack, etc. to prevent damage that might occur through contact with water or corrosive liquids.
 - 1. Tag the unit, "Out of Service."
 - 2. Remove dirt and other matter from all surfaces.
- 3. Compare the results of your most recent inspection to the <u>RECORD</u>. Restore the carrier to satisfactory condition by performing all indicated repairs and replacements. DO NOT use the product until it is restored to satisfactory condition.
 - 4. Make a dated record of any repairs, adjustments and/or replacements.

LABELING DIAGRAM

The unit should be labeled as shown in the diagram. However, label content and location are subject to change so your product might not be labeled exactly as shown. Compare this diagram to your RECORD OF SATISFACTORY CONDITION. Replace all labels that are damaged, missing, or not easily readable (e.g. faded). Order replacement labels by contacting the <u>REPLACEMENT PARTS DEPARTMENT</u> online at https://www.vestil.com/page-parts-request.php. 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.



A: Label 232 (on outside of drum cradle)

▲ CAUTION	▲ ATENCIÓN	A ATTENTION		
DRUM MUST BE IN	EL TAMBOR DEBE DE ESTAR	LE BIDON DOIT ÊTRE EN		
VERTICAL POSITION	EN LA POSICIÓN VERTICAL	POSITION VERTICALE		
WHEN MOVING	CUANDO EN MOVIMIENTO	LORS D'UN DÉPLACEMENT		
VESTIL MANUFACTURING CORPORATION • Phone (260) 665-7586 • Fax (260) 665-1339 • sales@vestil.com • www.vestil.com				

B: Label 1049 (on fork pocket)

▲ WARNING

Improper use of this fork attachment might result in death or serious injury.

- · Using this front end attachment affects lift truck center of gravity
- Before using this fork attachment, US Federal regulation 29 CFR 1910.178 requires you to contact the manufacturer of your lift truck and request: Written approval [29 CFR 1910.178(a)(4)]
- 2. Markings for (fork) lift truck that:
 - Identify the attachment:
 - Give approximate weight of truck and attachment at maximum elevation with laterally-centered load. [29 CFR 1910.178(a)(5)].
- DO NOT use UNTIL lift truck is marked with corrected capacity tags.

C: Label 218 (on fork pocket)

WARNING A ADVERTENCIAS Improper use might result in death or serious El uso imapropiado puede resultar en muerte o herirás personal injury. Attach device to fork carriage personales. Atar aparato al mástil del montagcargas con with safety chain/strap. . cadenas/correrás.

Drive lift truck forward until forks contact ends of fork pockets

- Chain/straps must not be able to disconnect
- (slide free) from carriage.
- Safety chain/strap must be taut. Connect chain, strap to carriage via shortest line.
- Maneje el montacargas para adelante hasta que las cuñas hagan contacto con la orilla del bolsillo de las cuñas.
- La cadenas y correas no deben de deslizarse (soltarse) del mástil del montacargas.
- La cadena/correa de seguridad debe de estar apretado.
- Asegure la cadena/correa al mástil via la ruta mas corta.

D. Label 1153 (on fork packet)

D. Labor 1100 to	THOIR POCKO	' /
MODEL / MODÉLO / MODÈLE WEIGHT / PESO / MASS		
CAPACITY / CAPACIDAD / CAPACITÉ		
SERIAL / SERIE / SÉRIE		
UNITS: 2.2 lb. = 1kg	1" (or 1in.) = 2.54cm	1153

E: Label 220 (on outside of drum cradle)

▲ WARNING		A AVERTISSEMENT
KEEP CLEAR	MANTENGASE ALEJADO	SE TENIR À DISTANCE LORS DU FONCTIONNEMENT 22
WHEN IN USE	CUANDO SE ESTA OPERANDO	LORS DU FONCTIONNE

F: Label 1210 (on fork pocket)

AWARNING

Using this front end attachment exposes occupants and bystanders to risk of serious personal injuries or death.

- . DO NOT use this front end attachment with rough terrain lift trucks or telehandlers (boom lifts).
- ONLY use this attachment with high lift fork trucks utilizing a vertical mast and carriage.

 DO NOT operate truck with attachment on unimproved surfaces. ONLY operate the truck with the
- attachment on concrete or asphalt surfaces capable of supporting the truck and a full capacity load.

LIMITED WARRANTY

Vestil Manufacturing Company ("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 Company (260) 665-1339 info@vestil.com

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

Angola, IN 46703 (260) 665-7586 request" 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>90 days</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 Co. 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 code or standard is not a defect in material or workmanship.

