

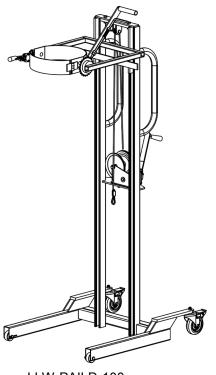
Vestil Manufacturing Corp.

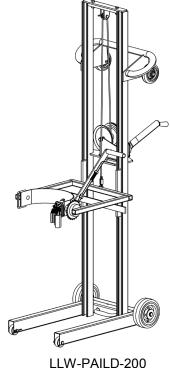
2999 North Wayne Street, P.O. Box 507, Angola, IN 46703 Telephone: (260) 665-7586 -or- Toll Free (800) 348-0868

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LLW-PAILD Series Pail Dumpers Use and Maintenance Manual





LLW-PAILD-100

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.

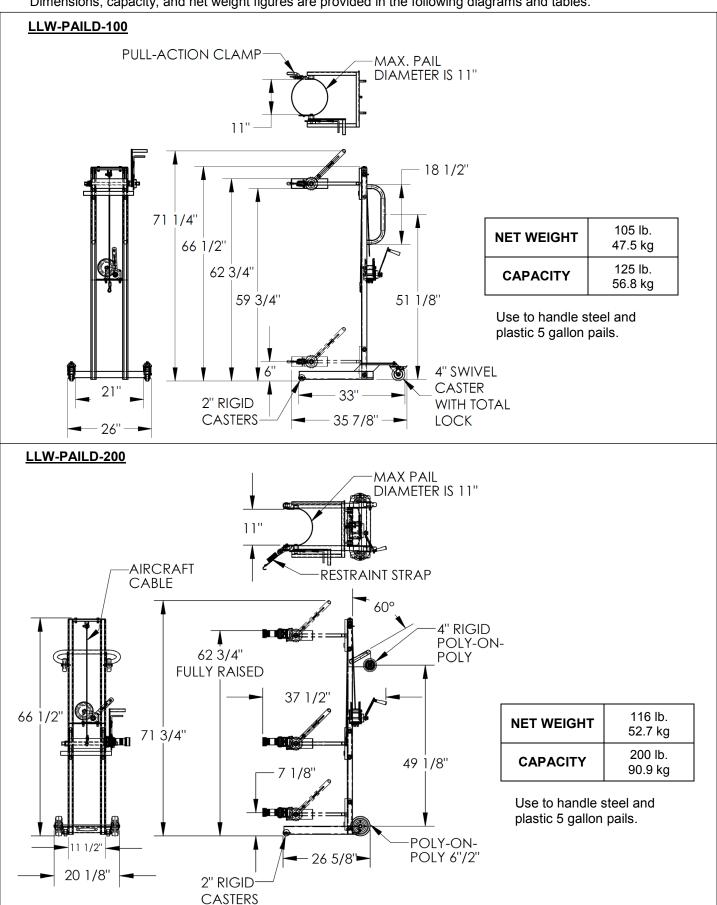
Replacement Parts and Technical Service

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.

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.

SPECIFICATIONS

Dimensions, capacity, and net weight figures are provided in the following diagrams and tables.



SIGNAL WORDS

This manual classifies personal injury risks and situations that might cause property damage with signal words. Signal words indicate the seriousness of injuries that might result if a particular act does, or does not, occur.

▲ DANGER

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

AWARNING

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.



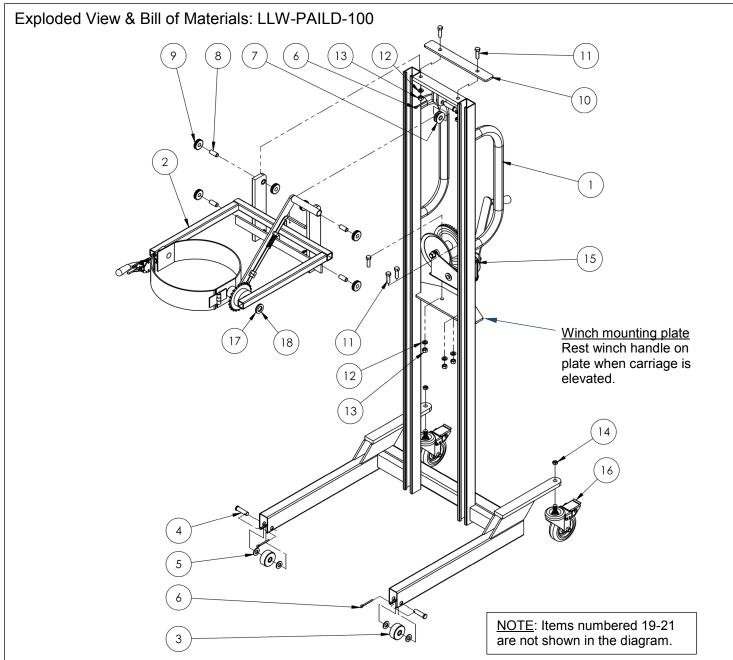
Identifies practices likely to result in product/property damage, such as operation that might damage the product.

HAZARDS

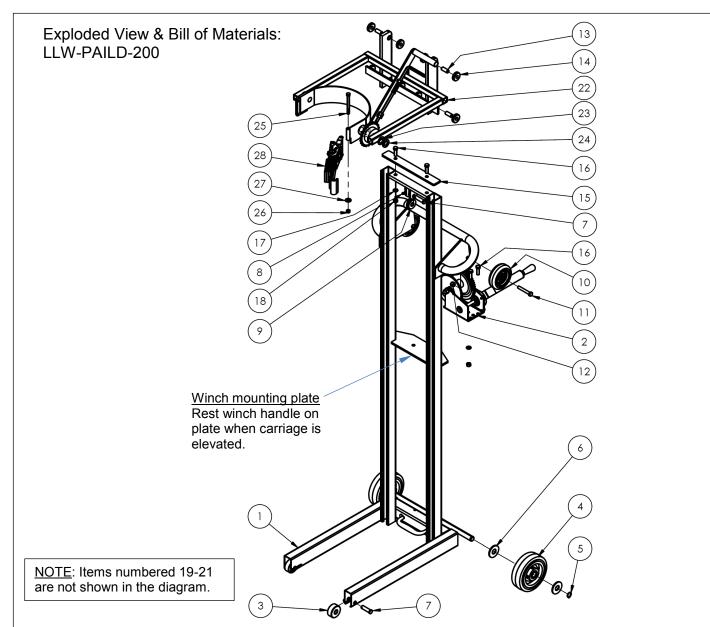
We strive to identify foreseeable hazards associated with the use of our products. However, material handling is dangerous. No manual can address every risk. Ultimately, the most effective means for preventing injury is for the end-user to apply sound judgment whenever using this lifter.

AWARNING Improper or careless operation might result in serious personal injuries.

- Failure to read and understand the entire manual before assembling, using or servicing the product <u>constitutes misuse</u>. Read the manual to refresh your understanding of proper use and maintenance procedures whenever necessary.
- Inspect the lifter before each use according to the instructions in *Inspections & Maintenance* on p. 7 8. DO NOT use the lifter unless it is in normal condition.
- Before using the lifter, inspect the area where it will be used.
- Instruct others to stay clear of the device and the supported load during operation.
- Avoid contact with moving parts during operation, i.e. the cable, carriage, rollers, casters, and wheels.
- DO NOT allow people to ride on the lifter.
- DO NOT lift a pail that weighs more than the capacity of your unit. Capacity information appears on label 287, which appears in the *Labeling diagram* on p. 8. Also see appropriate *Specifications* diagram and table on p. 2.
- Pails lids must be tightly sealed.
- DO NOT tilt the lifter while carrying a load.
- Watch the carriage while raising and lowering a pail. The carriage should be level. It should move smoothly up and down the mast. Watch for binding or jerky movement. Listen for unusual noises. Tag the unit "Out of order" and do not use it if you observe anything unusual.
- Only use this lifter on even, level ground. DO NOT transport loads across inclines or over stairs. If you must move across sloped terrain, do not transport the lifter by yourself unless you can easily control it. Get someone to help you control the unit, if necessary. Both of you should stand uphill of the lifter while moving it.
- Enlist a coworker to help you lift, load, and unload the unit whenever necessary.
- DO NOT perform maintenance on this product UNLESS it is unloaded and the carriage is lowered. If the unit requires repairs, ONLY install manufacturer-approved replacement parts.
- Before leaving the unit unattended, lower the carriage.
- DO NOT use the lifter UNLESS all labels are in place and readable. See Labeling diagram on p. 8.
- DO NOT modify this product in any way. Modifying the lifter might make it unsafe to use and automatically voids the Limited Warranty.



Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	21-514-092	Weldment, frame	1	12	33622	Split lock washer, carbon steel, medium zinc finish, ³ / ₈ "	5
2	21-513-072	Subassembly, drum carriage	1	13	36106	Hex nut, gr. A, zinc plated, 3/8" - 16	5
3	21-527-002	Subassembly, roller with bushing	2	14	37026	Jam Nylock insert lock nut, 3/8" – 16UNC, zinc plated	2
4	21-112-003	Pin, ¹ / ₂ " x 1 ¹⁵ / ₁₆ " retaining clevis	3	15	21-042-002- 001	Hand winch, foldable handle	1
5	33011	Flat washer, USS, plain finish, 1/2"	4	16	16-132-156	4" stem caster with brake	2
6	65107	Cotter pin, zinc finish, 5/32" x 2"	3	17	33424	Machine bushing, low carbon, plain finish, ³ / ₄ " x 18Ga.	1
7	21-527-001	Subassembly, pulley with bushing	1	18	33426	Machine bushing, low carbon, plain finish, ³ / ₄ "	1
8	21-112-002	Pin, roller	4	19	21-145-014	Specialty hardware, ³ / ₁₆ " aircraft cable	1
9	21-027-003	Roller, guide	8	20	99-145-067	Compression sleeve, ³ / ₁₆ " x 1"	1
10	21-017-016	Bar stiffener	1	21	21-145-013	Specialty hardware, thimble	1
11	11107	Hex bolt, gr. A, zinc finish, ³ / ₈ "-16x 1 ¹ / ₄ "	5				

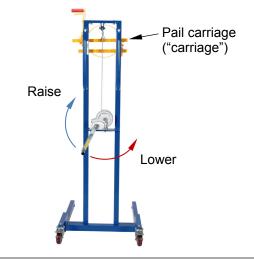


Item	Part no.	Description	Qty.	Item	Part no.	Description	Qty.
1	21-514-005	Weldment, frame	1	15	21-017-016	Bar stiffener	1
2	21-042-002-001	Manual winch, foldable handle	1	16	11107	Hex bolt, gr. A, zinc finish, ³ / ₈ "-16x 1 ¹ / ₄ "	5
3	21-527-002	Subassembly, roller with bushing ("roller")	2	17	33622	Split lock washer, carbon steel, med. zinc finish, ³ / ₈ "	5
4	16-132-058	Wheel, poly-on-poly, PP-4/1.25-W	2	18	36106	Hex nut, gr. A, zinc plated, ³ / ₈ "-16	5
5	68015	External retaining ring, phosphate, 3/4"	2	19	21-145-013	Specialty hardware, thimble	1
6	33018	USS flat washer, zinc plated, 3/4"	4	20	99-145-067	Compression sleeve, ³ / ₁₆ " x 1"	1
7	21-112-003	Pin, ¹ / ₂ " x 1 ¹⁵ / ₁₆ " retaining clevis	3	21	21-145-014	Specialty hardware, ³ / ₁₆ " aircraft cable	1
8	65107	Cotter pin, zinc finish, ⁵ / ₃₂ " x 2"	3	22	21-513-072	Subassembly, carriage	1
9	21-527-001	Subassembly, pulley with bushing	1	23	33424	Machine bushing, low carbon, plain finish, ³ / ₄ " x 18ga.	1
10	16-132-009	Wheel, poly-on-poly, 4" x 1.25"	2	24	33426	Machine bushing, low carbon, plain finish, ³ / ₄ "	1
11	11113	Hex bolt, gr. A, plain finish, $^3/_8$ "-16x $2^1/_2$ "	2	25	11067	HHCS #2, zinc plated, ⁵ / ₁₆ "-18x3 ¹ / ₂ "	1
12	37024	Nylon insert lock nut, gr. 2, zinc finish, ³ / ₈ "-16	2	26	36104	Hex nut, gr. A, zinc plated, ⁵ / ₁₆ "-18	1
13	21-112-002	Pin, roller	4	27	33006	Flat washer, zinc plated, USS, 5/16"	1
14	21-027-003	Roller, guide ("mast roller")	8	28	16-145-018	2" x 36" strap with ratchet	1

USING THE HAND TRUCK

This product is a "manually-propelled high lift industrial truck" according to the national standard ANSI/ITSDF B56.10-2012 ("B56.10"). Acquire a copy of B56.10, which is available at no cost through the ITSDF website (www.itsdf.org). Review the operation recommendations. Instructions in this manual are meant to **supplement** those recommendations.

Raising and lowering the carriage: To raise the carriage, rotate the handle clockwise. The carriage rises ~1 inch with each full rotation. To lower the carriage, rotate the handle counterclockwise.



ONLY use this device after completing the training program outlined in B56.10, sections 4.17 and 4.18.1-.4.

- Develop safe working habits and an awareness of hazardous conditions occurring or present during operation of the lifter.
- Inspect the area where the lifter will be used to identify unusual operating conditions. Implement additional safety precautions as conditions require. Usual conditions could include:
 - 1. Irregularities in the floor/surface;
 - Unsound surfaces, i.e. surfaces that cannot support your weight plus the weight of the lifter and a full capacity load.
- Perform the following function test before each use:
 - 1. Raise and lower the carriage and confirm normal condition of the mast, winch, mast rollers, and drum carriage (see "Inspections & Maintenance" section on p. 7-8).
 - 2. Test the casters, wheels, and rollers: all should roll smoothly, should not be severely worn, and should be securely fastened to the frame of the lifter.

Inspect the lifter according to the instructions in *Inspections & Maintenance* on p. 7-8. Use the lifter only if it is in normal condition.

Step 1: Grasp the handle(s) with both hands and push the lifter to the pail you need to handle. Keep your feet away from the wheels as the lifter moves. Move the lifter to a position near the load. [LLW-PAILD-100] apply the caster brakes.

<u>Step 2</u>: Lower the carriage to the level of the pail. The pivot point of the carrier (center of sprocket) should approximately line up with the middle of the pail.

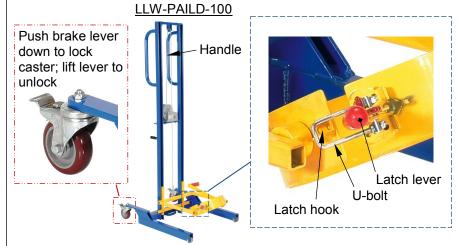
Step 3: Open the drum carrier.

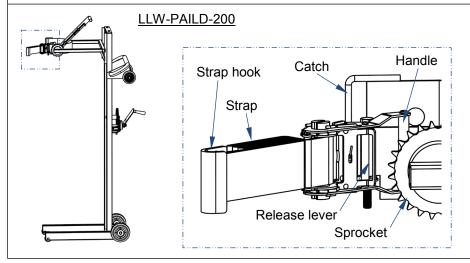
 a. [LLW-PAILD-100] Unlatch the drum carrier. Lift the latch lever and separate the U-bolt from the latch hook.

-OR-

b. [LLW-PAILD-200] Loosen the ratchet strap and unhook it from the carrier. To loosen the strap, pull up on the release lever and hold it. Open the ratchet mechanism--rotate the handle until the 2 sides of the ratchet mechanism are 180 degrees apart. Pulling the strap will unwind it from the spool and cause slack to form.

Step 4: Move the lifter so that the pail rests against the inside/back of the



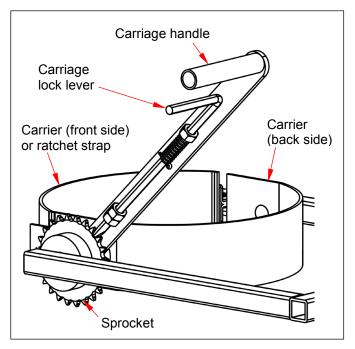


carrier. If the pail has a handle, tape or otherwise secure the handle to the side of the pail. **NOTE**: The pail should be sealed, i.e. lid secured to the top.

- a. [LLW-PAILD-100] Close the carrier and latch it by seating the U-bolt in the latch hook and pressing the latch lever down.
- b. [LLW-PAILD-200] Wrap the strap around the pail and reattach the hook to the catch on the opposite end of the carrier. Pull up on the release lever and hold it. Fold the ratchet together and let go of the release lever. Now move the handle back-and-forth to tighten the strap around the pail. To avoid breaking the pail, DO NOT overtighten the strap!

<u>Step 5</u>: Lift the pail just a few inches above the ground. Confirm that the pail is secure in the carrier, i.e. cannot spin or slide up-and-down. If the pail is secure, push the lifter to the desired location

<u>Step 6</u>: Lock the caster brakes (LLW-PAILD-100) and raise the pail to the necessary dumping height by turning the winch handle clockwise. Rest the handle on the winch mounting bracket. See appropriate *Exploded view* on either p. 4 or p. 5.



<u>Step 7</u>: Grasp the carriage handle and pull up on the carriage lock lever. When the lever unseats from the sprocket, the carriage is able to rotate. Rotate the drum as needed and release the lock lever. [**NOTE**: Always dump away from the lifter.] Adjust the dumping angle as necessary by unlocking, repositioning, and re-locking the carriage. There are 9 locking positions between vertical and 135° forward rotation).

<u>Step 8</u>: To remove the pail from the carrier, reorient them to vertical position. Lower the pail to a few inches above the ground and move the lifter to the appropriate location. Lower the pail to the ground. Unlatch the carrier [LLW-PAILD-100] or release the ratchet strap [LLW-PAILD-200]. See <u>Step 3</u> on p. 6.

<u>Step 9</u>: Lower the deck until it is a few inches above the legs and return the lifter to its storage location. Engage the brakes (if equipped with optional brakes) and lower the deck completely. Store the lifter in a dry, indoor location.

RECORD OF SATISFACTORY CONDITION (THE "RECORD")

Record the condition of the hand truck before putting it into service. Thoroughly photograph the unit from multiple angles so that all operating mechanisms are clearly visible. Take close range photographs of the labeling applied to the truck. Raise and lower the deck. Describe the operation of the winch. Describe sounds heard as the deck rises and descends. Include detailed descriptions about the frame, rollers, wheels, casters, carriage, mast rollers, and the lifting mechanisms (winch, cable, and pulleys). How much effort is required to turn the winch? Apply the brake. Photograph the brake. Try to move the truck with the brake applied and describe how the brake resists movement. Collate all photographs and writings into a single file. Give the file a name that clearly identifies it. This file is a record of the unit in satisfactory condition. Compare the findings of all inspections to the record to determine whether the truck is in satisfactory condition. Purely cosmetic changes, like damaged paint/powder coat are not changes from satisfactory condition. However, touch-up paint to be applied to all affected areas as soon as damage occurs.

INSPECTIONS & MAINTENANCE

Regular inspections and maintenance are necessary to keep the device in normal condition. Compare the results of each inspection to the *Record* to determine whether the unit is satisfactory condition or requires repairs or replacement parts. If you are uncertain whether a part requires repair or replacement, contact *Technical Service* for assistance.

- Periodically lubricate moving parts.
- Keep the product clean and dry.
- Only use manufacturer-approved replacement parts.

At least once every 2 weeks, visually inspect the following components:

1. Winch, winch mounting bracket, cable, carriage rollers, and pulley (see Raising and lowering the carriage on p. 6): Cycle the carriage up and down. Listen for unusual noises and watch for binding or rough movement as the carriage moves. If the carriage does not move smoothly or makes noise as it moves up or down the upright, apply a silicon wax or silicon spray to the inside of the mast frame. Examine the winch. Make sure that the spool is intact and rotates smoothly when the handle is turned. Inspect the mounting bracket. The winch should be solidly

attached to the bracket. Tighten all loose fasteners. Lower the carriage and examine the cable for reeving, stretching, thinning portions, etc. Confirm that the pulley rotates freely and is securely fastened to the mast.

- Frame (mast, base): examine the frame members for damaged welds, severe rusting, cracks, bends, etc. Remove rust with steel wool. Clean the affected areas and apply touch-up paint.
- Pail carriage: Pull up on the release lever and verify that the carriage rotates normally. The release spring should automatically cause the release lever to engage the sprocket and lock the carriage.
 - a. LLW-PAILD-100: confirm that the carrier opens and closes normally, i.e. the carriage latch functions
 - b. LLW-PAILD-200: examine the ratchet strap for cuts, tears, etc. Inspect the hook and that ratchet mechanism. Confirm that all parts operate normally.
- Wheels, rollers, and casters: check each wheel, caster, and roller for wobbliness, damage, and severe wear. All should roll smoothly. Clean them to remove grit from the surfaces, if necessary.
- <u>Hardware</u>: examine the pins, bolts, nuts, etc. Tighten loose fasteners. Replace all damaged fasteners.

Maintenance: Implement a maintenance program to ensure that the lifter functions normally for as long as possible. Page 9 of ANSI/ITSDF standard B56.10-2006, "Manually propelled high lift industrial trucks", describes recommended maintenance procedures. A copy of the standard is downloadable for free from the ITSDF website (see www.itsdf.org). Apply those recommendations in conjunction with the following steps.

- Tag the lifter, "Out of Service."
- Inspect the lifter as described on p. 7. If deformity, corrosion, rusting, or excessive wear of structural members is present, permanently remove the lifter from service.
- Remove any dirt or other matter from the cable and pulleys and other lifter surfaces.
- Perform all other necessary adjustments and/or repairs. DO NOT modify the lifter.
- Make a dated record of the repairs, adjustments and/or replacements made.

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. Thoroughly photograph the unit when you first receive it as discussed in the Record of Satisfactory Condition section of this manual. Make sure that your Record includes a photograph of each label. Modify this diagram, if necessary, to indicate labeling actually applied. Replace all labels that are, damaged, missing, or not easily readable (e.g. faded). Contact the Parts Department online at http://www.vestilmfg.com/parts info.htm to order replacement labels. You may also call (260) 665-7586 and ask the operator to connect you to the *Parts Department*.



B: Label 527 (on back side of drum carriage)



lbs

kgs

kgs

287 REV 0812

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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 MailFaxEmailVestil Manufacturing Corporation(260) 665-1339info@vestil.com2999 North Wayne Street, PO Box 507PhoneEnter "Warranty service request"Angola, IN 46703(260) 665-7586in 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 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.

