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HPC-SERIES VERTICAL PLATE CLAMPS USE AND MAINTENANCE 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 https://www.vestil.com/page-parts-request.php.

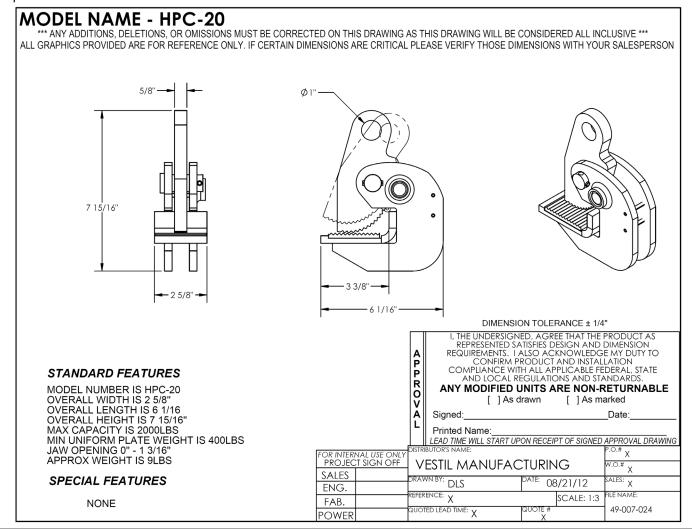
Electronic copies of Instruction Manuals

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

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SPECIFICATIONS

Documents that provide specifications for HPC-series plate clamps are available online to anyone who visits Vestil's website. 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=562. Click the "Specifications" tab. Scroll the page to the entry for the model ladder you purchased, and click the button in the "PDF" column that looks like a pencil inside a blue-bordered 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 for model HPC-20.



SIGNAL WORDS

This manual uses SIGNAL WORDS to direct the reader's attention to important safety-related messages. These messages describe uses of the product that could result in personal injury or property damage. Each signal word corresponds to a specific hazard level.



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.



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 all foreseeable hazards associated with the use of its products. However, material handling is dangerous and no manual can address every conceivable risk. Ultimately, the most effective way to prevent injury is to apply sound judgment whenever using this device.

DANGER

Electrocution Risk: Avoid contact with live electrical wires

WARNING

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

- Read and understand the entire manual before using, inspecting, or servicing the plate clamp. DO NOT use this device until you read and understand the entire instruction manual. Read the manual to refresh your understanding of proper use and maintenance procedures. Review the instructions and safety messages included in the manuals for your crane, trolley, hoist, and any other device used in conjunction with the clamp. Use this device as instructed in this manual. You must also follow applicable provisions of ASME B30.20 "Below-the-Hook Lifting Devices" (BTH), and all laws, regulations, codes, etc. that apply to BTH devices where the clamp is used.
- <u>DO NOT open a clamp while lifting or moving a sheet of material</u>. BEFORE opening a clamp be certain that the sheet material is entirely supported by the ground or other surface, and is fully stabilized e.g. can't fall over, roll, slide, or move in an uncontrolled manner. If a second person is needed to immobilize the material, find someone to help you. <u>DO NOT open a clamp while using it to lift or move sheet material</u>.
- Inspect plate clamps as instructed in <u>INSPECTIONS AND MAITENANCE</u> on p. 7-8. Acquire a copy of the most recent revision of ASME B30.20. Apply all applicable inspection procedures in ASME B30.20.
- Maintain plate clamps according to the <u>INSPECTIONS AND MAITENANCE</u> instructions on p. 7-8 of the manual. These procedures <u>supplement</u> the maintenance recommendations of ASME B30.20. If any instruction in this manual conflicts with B30.20, then you should apply the provision in B30.20. DO NOT use this lifter if it is damaged, malfunctioning, or missing parts.
- ALWAYS attach the plate clamp to a <u>safety hook</u> to prevent accidental/unintended detachment. DO NOT connect the clamp to a safety hook that does not function properly or that is damaged.
- Clean and dry the sheet material before attaching plate clamps to it. In particular, clean the material where clamps will be attached. Debris on the surfaces of the sheet material could impair the connections between clamps and the material.
- Make sure that the path of travel is clear of debris and obstacles BEFORE picking up the load. Make sure that no person is in the travel path.
- DO NOT lift and move a sheet of material unless it balances when suspended. Attach as many clamps as necessary to balance the load while it is suspended. Load balancing is discussed in <u>USING THE PLATE CLAMP</u> on p. 5-6. If a load cannot be balanced, do not use the lifter to elevate it. Select another lifting device.
- Only lift the topmost sheet of a stack. Make sure that there are no items on the sheet before lifting it.
- DO NOT attach the clamp to a side edge. ONLY attach the clamp to the top edge of a plate.
- DO NOT lift more than 1 sheet at a time.
- DO NOT lift a sheet from a vertical position. HPC's are horizontal plate clamps. They must ONLY be used to lift a plate as shown in Step 2 on p. 5.
- DO NOT sit on or apply any load to the sheet material held by the clamp.
- <u>DO NOT exceed the capacity of the clamp. Never attempt to lift material that weighs more than the capacity of the clamp.</u> Clamp capacity is provided on the data tag which is fastened to the face of your clamp. See Data Tag in <u>LABELING DIAGRAM</u> on p. 8.
- DO NOT lift a load higher than necessary. See USING THE PLATE CLAMP on p. 5-6.
- DO NOT raise the load over your feet or any other part of your body.
- DO NOT lift people or carry material over people. DO NOT lift any apparatus supporting/carrying people such as a work platform. The clamp must ONLY be used to lift single sheets of material.
- DO NOT get in front of or behind a suspended load while moving it. Stand to one side of the load. Keep feet out from underneath the load at all times. Make sure that clothing cannot become entangled in the load, the rigging, or the clamps.
- Keep an eye on the load at all times while it is suspended.
- DO NOT leave suspended material unattended. Move the load to the unloading location, land the load, and disengage the clamps before leaving it.
- Referring to American National Standard ASME BTH-1, this clamp is BTH design category B (loads and variations which are severe and not accurately defined), service class 1 (20,001 to 100,000 load cycles). DO NOT

AWARNING (Continued from p. 4)

exceed these usage parameters. Permanently remove a clamp from service before exceeding the maximum number of load cycles.

- DO NOT elevate a load if the hoist rope/chain or rigging is kinked. Make sure that multiple part lines are not twisted around each other before elevating the load.
- DO NOT modify the product in any way without first obtaining written approval from Vestil. Unapproved modifications automatically void the LIMITED WARRANTY (p. 11) and might make the product unsafe to use.
- Avoid load swing by making sure the hoist rope/chain is vertical before raising the load.
- Slowly and carefully raise, lower, and move loads with the clamp. DO NOT start or stop suddenly. Sudden stops/starts might induce load swing or disrupt the connection between a clamp and the sheet.
- DO NOT drag loads with a clamp.
- DO NOT remove or deface labeling applied to the clamp. DO NOT use a clamp UNLESS each label and tag is in place, undamaged, and easily readable from a reasonable distance. See LABELING DIAGRAM on p. 8.
- Inspect the product as instructed in INSPECTIONS AND MAINTENANCE on p. 7-8.
- DO NOT elevate a load any higher than necessary to move it. Keep it as close to the ground as possible.
- DO NOT use a plate clamp tagged "Out of service" or if it is similarly designated.

NATIONAL STANDARDS

HPC-series products are Below-the-Hook lifting (BTH) devices. They facilitate the handling of materials in sheet form. American National Standard ASME B30.20 (the "Standard") can be purchased online at https://blog.ansi.org/2018/10/asme-b30-20-18-changes-below-hook-lifting/. The Standard provides inspection, testing, maintenance, and operation instructions for users of BTH devices. Acquire a copy of the Standard. Apply all provisions that apply to Structural and Mechanical Lifting Devices. Contact local occupational safety and health specialists to determine whether there are laws, ordinances, codes, etc. ("authorities") in addition to the Standard that apply to BTH devices in the location where the plate clamp will be used. If content in this manual conflicts with provisions in authorities or the Standard, apply the provisions from the authorities or Standard. Please contact Vestil's <u>TECHNICAL SERVICE</u> department to report conflicts as soon as they are discovered.

MINIMUM UNIFORM SHEET WEIGHT & UNIFORM CAPACITY

In order for the clamp mechanism to securely attach to a sheet of material, a sheet of material must weigh at least as much as the MINIMUM UNIFORM SHEET WEIGHT (MUSW) of the model of your plate clamp which is provided in Table 1. Do not attempt to lift a sheet if the sheet weighs less than the MUPW of your clamp. Do not attempt to lift a sheet of material that exceeds the capacity of your clamp.

Table 1

MODEL	MINIMUM UNIFORM SHEET WEIGHT	UNIFORM CAPACITY	NET WEIGHT
HPC-20	400 lb. (181.8 kg)	2,000 lb. (909.1 kg)	9 lb. (4.1 kg)
HPC-40	800 lb. (363.6 kg)	4000 lb. (1,818.2 kg)	12 lb. (5.5 kg)
HPC-80	1,600 lb. (727.3 kg)	8,000 lb. (3,636.4 kg)	15 lb. (6.8 kg)
HPC-100	2,800 lb. (1272.7 kg)	10,000 lb. (4,545.5 kg)	17 lb. (7.7 kg)

CAPACITY VARIES WITH SLING ANGLE

Clamp capacity decreases if the line of attachment to the hoisting device is not vertical. Table 2 provides capacity figures that correspond to specific ranges of sling angles.

SLING	ADJUSTED CAPACITY				
ANGLE	% OF UNIFORM CAPACITY	HPC-20	HPC-40	HPC-80	HPC-100
0° ≤ A ≤ 60°	100%	2000 LB. 909.1KG	4000 LB. 1818.2KG	8000 LB. 3636.4KG	10000 LB. 4545.5KG
60° < B ≤ 90°	75%	1500 LB. 681.8KG	3000 LB. 1363.6KG	6000LB. 2727.3KG	7500 LB. 3409.1KG
90° < C ≤ 120°	50%	1000 LB. 454.5KG	2000 LB. 909.1KG	4000 LB. 1818.2KG	5000 LB. 2272.7KG
>120°	0%	Do not use	Do not use	Do not use	Do not use

Table 2

OPERATION PARAMETERS

HPC series plate clamps must only be used to lift materials in sheet form. Material thickness must fall within the range indicated in. Clamps are not designed for use with stainless steel or aluminum sheets. Materials must have surface hardness up to 30 RC (300 HB). Ambient and material temperatures must also fall within the range indicated.

Table 3

MODEL	Material Thickness		(Ambient) Tempera	Bale		
MODEL	Minimum (25% of max. jaw opening)	Maximum	Minimum	Maximum	Opening	
HPC-20	¹³ / ₆₄ " (0.6cm)	¹³ / ₁₆ " (0.47 cm)	0°F (-17.8°C)	225°F (107.2°C)	$1^{3}/_{16}$ " (3cm)	
HPC-40	⁵ / ₁₆ " (0.8 cm)	1 ¹ / ₄ " (3.1 cm)	0°F (-17.8°C)	225°F (107.2°C)	1.2" (3cm)	
HPC-80	¹¹ / ₃₂ " (0.4 cm)	$1^{3}/_{8}$ " (3.4 cm)	0°F (-17.8°C)	225°F (107.2°C)	1.2" (3cm)	
HPC-100	²³ / ₆₄ " (1 cm)	$1^{7}/_{16}$ " (3.6 cm)	0°F (-17.8°C)	225°F (107.2°C)	1.2" (3cm)	

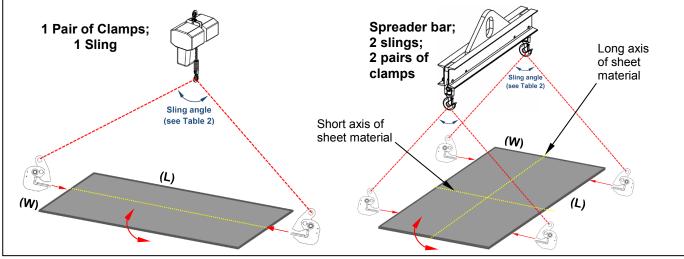
USING THE PLATE CLAMP

NOTE: HPC-series clamps are **BTH design category B** (used for loads and variations which are severe and not accurately defined), **service class 1** (20,001 to 100,000 load cycles). DO NOT use them to lift sheets of stainless steel or aluminum. Sheet material surface hardness must be 30 RC (300 HB) or less. Sheet material must weigh AT LEAST as much as the <u>MINIMUM UNIFORM SHEET WEIGHT</u> (MUSW) of your clamp. MUSW figures for all models are provided on p. 4. The plate thickness must be at least 25% of the maximum jaw opening. Using the clamp to only lift sheets of the same thickness causes wear in a specific region of the gripper. The gripper must be replaced sooner and more frequently as a result.

The following use Instructions are meant to *supplement* applicable instructions of ASME B30.20. Clamps should only be used by trained, qualified personnel. ASME B30.20 defines *qualified person* as "a person who, by the possession of a recognized degree in an applicable field or certificate of professional standing, or who, by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter at hand." Qualified persons include designated persons, trainees under the direct supervision of a designated person, maintenance personnel, test personnel, and inspectors.

STEP 1: Perform an **EVERY LIFT INSPECTION** described in the <u>INSPECTIONS & MAINTENANCE</u> section on p. 9 of this manual. Inspect each clamp that is used for each lift. The clamps must be in <u>SATISFACTORY</u> CONDITION. Center the hoist above the sheet of material. Attach rigging (sling and/or spreader bar + slings).

STEP 2: Attach clamps. At least 1 pair of clamps is necessary to lift a sheet of material. Use as many pairs of clamps as necessary to balance the sheet when it is suspended. Connect pairs of clamps to the sling(s). Safety hooks at all attachment points are recommended, i.e. the sling hooks, spreader bar hooks, and hoist hook should include automatically closing latches. When only 1 pair of clamps is used, the sheet tends to rotate about a line/axis between the clamps. Only lift narrow (not very wide) sheets with 1 pair of clamps. Attach the clamps to the short sides of the sheet (width (W) sides). The sheet must not rotate and must remain level when suspended, i.e. the plane of the sheet must be horizontal. If that cannot be accomplished with only 1 pair of clamps, use additional pairs of clamps. When 2 or more pairs of clamps are used, attach clamps to the long sides of the sheet (length (L) sides). Clamps on the same side of the sheet must be spaced equally on either side of the short axis.

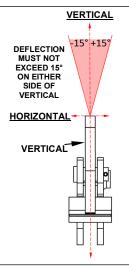


STEP 3: The edge of the sheet must contact the back of the mouth of each clamp. HPC series clamps are non-locking. Constant tension must be applied to the grippers of all clamps for the material to be securely held. Do not relieve tension until the material is fully supported by your work surface or the ground.

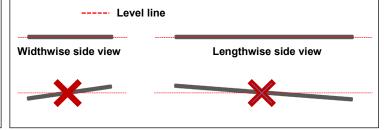
Adjust the position of the clamp by moving the hoist. DO NOT push or pull the clamp so that the hoist chain/rope is not vertical. This is important because any deflection of the chain/rope from straight upand-down will cause the load to swing when lifted. A swinging load may cause serious personal injuries



STEP 4: Slightly elevate the sheet of material. The sheet must balance and must not rotate. There must be no side load applied to any clamp. The gripper arm must not be deflected any more than 15° from vertical. If deflection exceeds 15°, adjust rigging to reduce deflection. Do not lift or move the sheet if deflection cannot be brought within 0°-15°.



STEP 5: Confirm that the sheet balances when suspended. Raise the load just a few inches. The sheet must be level (balanced) widthwise and lengthwise. If the sheet is not level, return it to the ground. Reposition clamps as necessary to achieve balance. Raise the sheet again to see if it is now balanced. DO NOT proceed to the next step until the load is properly balanced. Use other lifting devices to raise and move the sheet if it cannot be balanced.



STEP 6: The sheet material must not flex while it is suspended. Material flexion can disrupt the grip of clamps on the material.



STEP 7: Lift the sheet to an ergonomically comfortable height. Steady the sheet by lightly grasping one of the side edges and the trailing edge. Do not apply weight to the sheet material. Do not touch any of the clamps. Do not touch the rigging. Carefully move the sheet to the work location.

LIFTING RULES

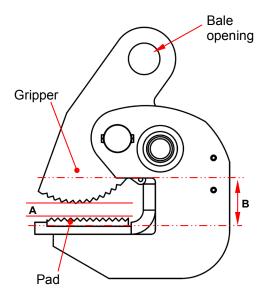
- a) Regularly review and apply all <u>SAFETY INSTRUCTIONS</u> from p. 2-3, as well as the *Operation* section of the applicable chapter of ASME B30.20.
- b) NEVER lift material over yourself or other persons. Make sure that all persons have cleared the area before lifting and moving material.
- c) Stand at arm's length to the side of the material.
- d) If you cannot adequately control the sheet by yourself, ask someone to help you. The second person should grasp the opposite side edge and the trailing edge of the sheet. Keep feet out from underneath the load.
- e) Keep the load level. Watch the sheet while moving it and proceed carefully. If your hoist is moved by a motorized trolley, allow the trolley to provide all movement.

STEP 8: Make sure that the sheet is not swinging or rotating, then slowly lower the sheet to the ground or work surface. If you cannot control BOTH the clamp and sheet material without difficulty, ask someone to help you.

STEP 9: Disengage the clamps. There must be adequate slack in the rigging for the mouths of the clamps to open. Pull the clamps off of the sheet.

RECORD OF SATISFACTORY CONDITION (THE "RECORD")

Record the condition of the plate clamp before putting it into regular service. Thoroughly photograph the unit. Include close range photos of all labels and tags, the bale, the gripper and pad, and the lock mechanisms. Measure the height and width of the bale opening. Measure the gripper teeth. Measure the throat: A) With the mouth open (distance between lowest point of gripper and pad); and B) Top to bottom of the mouth. Record your measurements. Write a description of the overall condition of the clamp. How much force is required to lock and unlock the clamp? Lock the clamp. Try to manually move the gripper. There should be definite resistance against movement while the lock is engaged. Collect all photographs and writings in a single file. Mark the file appropriately to identify it. The file is a record of the clamp in satisfactory condition. Compare the results of all inspections to this RECORD to determine whether the unit is in satisfactory condition. If the clamp 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, rust/corrosion will degrade the condition of the clamp and could make it unsafe to use.



LOAD TESTS

After creating a <u>RECORD OF SATISFACTORY CONDITION</u> and before using the lifter for the first time, a qualified person should conduct a load test. The test load should be 125% of the capacity of your clamp. For example, the test load for an HPC-20 clamp is 2,000 x 1.25 = 2,500lb. (1136.4kg). Elevate the test load a few inches above the ground for approximately 1 minute. Ground the load and disconnect it from the plate clamp. Perform a <u>Monthly Inspection</u> as described in <u>INSPECTIONS AND MAINTENANCE</u> (below). The (qualified) person performing the test must compose a written report confirming the load rating of the clamp. The load rating (capacity) should not be more than 80% of the test load. The clamp must undergo load testing whenever it is repaired. Never modify the clamp.

INSPECTIONS AND MAINTENANCE

NOTICE Regular inspections and maintenance are essential. Always inspect and maintain this product in accordance with the instructions in this manual.

Apply all relevant inspection instructions in your copy of ASME B30.20 as well as the following instructions. Inspections and maintenance should only be performed by qualified persons. Compare the results of each inspection to the <u>RECORD OF SATISFACTORY CONDITION</u>. Do not use the clamp unless all parts are in satisfactory condition. Replace parts that are not in satisfactory condition before returning the clamp to service. Only use manufacturer-approved replacement parts to restore the unit to satisfactory condition. **DON'T GUESS! If you have any questions about the condition of your lifter, contact the <u>TECHNICAL SERVICE</u> department. The phone number is provided on the cover page of this manual. <u>Never make temporary repairs of damaged or missing parts</u>.**

- I. Disconnect the clamp from the hoist hook and tag it "Out of service".
- II. Perform the appropriate inspection (A or B). If a component is not in satisfactory condition, repair it or replace it as necessary to restore the unit to satisfactory condition. DO NOT modify the clamp.
 - A. <u>Inspection before each use</u> The operator must inspect the clamp before every lift. Closely inspect the bale mechanisms. Check the bale loop and bale pin for cracks, elongation, warps, and other forms of damage. Confirm that the bale mechanism is securely pinned in place. Remove debris from the clamp surfaces. Check the gripper teeth. Teeth must be sharp and free of foreign material.
 - B. <u>Monthly inspections</u> At least once per month a qualified person must perform the following inspections and maintenance. Written reports should be prepared for every monthly inspection including inspections following *LOAD TESTS*.
 - Surfaces: Look for forging fractures, weld fractures, significant wear, and deformations/distortions, corrosion/rusting, and metal fatigue. If rusting is purely superficial, remove it with a steel bristle brush or

- steel wool. Clean the affected area and apply touchup paint. If rusting, rot, or thinning has weakened the material, permanently remove the clamp from service.
- 2. **Mouth opening:** Measure the width of the mouth opening in the 2 places that were measured to generate the <u>RECORD</u>. Enlargement of the opening indicates that the clamp has been overloaded. The clamp must be permanently removed from service.
- 3. **Gripper/cam, gripper teeth, and pad:** Examine the gripper, gripper teeth and the teeth of the pad. If teeth of the gripper are flattened by 50% or more, permanently remove the clamp from service. If the pad teeth are flattened by more than 50%, replace the pad. If the plate clamp is used to only move sheets of a specific thickness, the gripper surface will wear in only 1 area and will have to be replaced sooner than would otherwise be necessary as well as have to be replaced more frequently.
- 4. **Pins and pinholes, and other fasteners:** Examine all pins and pinholes. Pins should be straight. Pinholes should be round, not ovoid. Evaluate the degree of wear of all pins and pinholes. Examine pin retaining clips and spring pins (used to secure pins in place).
- 5. **Bale opening:** Measure the bale opening (height and width). Make sure the measurements match the measurements in the <u>RECORD</u>. If any cracks, distortions, elongation, or severe wear is found, permanently remove the clamp from service.
- 6. **Labels:** Check all labels. Labels are shown in the <u>LABELING DIAGRAM</u> (below). Replace labels that are missing, damaged, or not easily readable.

LABELING DIAGRAM

Label content and location are subject to change. Your product might not be labeled exactly as shown. Compare this diagram to your <u>RECORD OF SATISFACTORY CONDITION</u>. If differences exist between the diagram and the <u>RECORD</u>, contact <u>TECHNICAL SERVICE</u>. Replace all labels that are damaged, missing, or not easily readable (e.g. faded). Order replacement labels by contacting the parts department online at http://www.vestilmfg.com/parts_info.htm or by calling (260) 665-7586 and asking the operator to connect you to the <u>PARTS / TECHNICAL SERVICE DEPARTMENT</u>.



Label 675 (applied to back of tag 023): Hazards

▲ WARNING	▲ ADVERTENCIA		
DO NOT exceed rated capacity DO NOT use if damaged, multiructioning, or missing parts DO NOT tile people OR lift loads over people DO NOT raise load higher than necessary DO NOT leave a suppended load unattended DO NOT use lifter unless you read and understand the owner's manuel. DO NOT alter OR modify lifter DO NOT enrove OR obscure any label STAY CLEAR of suspended loads Secure load before using lift device.	NO vecoda la capacidad tasada NO USE is las partes estan dafiadas, no funcionan correctamente o fattan partes. NO eleve al personal o eleve cargas sobre el personal NO eleve la carga mas alto de lo necesario NO deje destaendida una carga, que este suspendida NO use el elevador a no ser que haya leido y entendido las instrucciones del manual del propietario NO altere o modifique el elevador NO quite u obscuerzca inirguna etiquetta - MANTENGASE delejado de las cargas suspendidas - MANTENGASE delejado ser sets dispositivo ver 131		

Tag 023 (connected to pear link via cable tie): Rated load information & BTH service class

Read Owners Manual f Lea Manual de Propieta			d de producto	
BHT-1 Design Category: B BHT-1 Categoría de Diseño B	BHT-1 Service (BHT-1 Categoria	a de Servicio: 1		
Capacidad	kgs.	Peso del Elevador	kgs.	
Capacity	lbs.	Lifter Weight	lbs.	
Model No No. Modelo		Serial No No. Serie		

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 the 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>30 days</u>. For wearing parts, the warranty period is <u>30 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.

