

VESTIL MANUFACTURING CORP.

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

Fax: (260) 665-1339

www.vestilmfg.com e-mail: sales@vestil.com

P-HOP-Series Portable Steel Hoppers Instruction Manual



Receiving instructions:

After delivery, IMMEDIATELY remove the packaging from the product in a manner that preserves the packaging and maintains the orientation of the product in the packaging; then inspect the product closely to determine whether it sustained damage during transport. If damage is discovered during the inspection, record a complete description of the damage on the bill of lading. If the product is undamaged, discard the packaging.

NOTES:

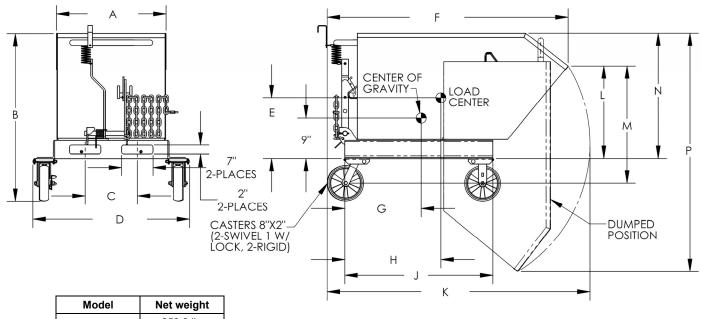
- 1) Compliance with laws, regulations, codes, and non-voluntary standards enforced in the location where the product is used is exclusively the responsibility of the owner/end-user.
- 2) VESTIL is not liable for any injury or property damage that occurs as a consequence of failing to apply either: a) the instructions in this manual; or b) information provided on labels affixed to the product.

Vestil is also not responsible for *any* consequential damages sustained as a result of failing to exercise sound judgment while assembling, installing, using or maintaining this product.

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Product specifications:

Dimensions and other product specifications for standard P-HOP-series hoppers appear in the diagram and table below.



Model	Net weight
P-HOP-0.5	253.8 lb. 115.4 kg
P-HOP-1	386.5 lb. 175.7 kg
P-HOP-1.5	447.6 lb. 203.5 kg

Model	Α	В	С	D	E	F	G	Н	J	K	L	М	N	Р
P-HOP-0.5	24 ⁷ / ₁₆ "	37 ⁹ / ₁₆ "	11 ⁵ / ₈ "	34 ¹⁵ / ₁₆ "	13 ⁹ / ₁₆ "	53 ¹¹ / ₁₆ "	17 ¹ / ₁₆ "	21 ⁷ / ₁₆ "	33"	58 ⁹ / ₁₆ "	20 ³ / ₄ "	26 ⁵ / ₁₆ "	28 ¹ / ₁₆ "	53 ³ / ₈ "
P-HOP-1	48 ⁷ / ₁₆ "	37 ⁹ / ₁₆ "	21 ⁵ / ₈ "	58 ¹⁵ / ₁₆ "	11 ³ / ₄ "	53 ³ / ₄ "	16 ¹⁵ / ₁₆ "	21 ³ / ₈ "	33"	58 ¹ / ₂ "	20 ¹ / ₂ "	30 ¹ / ₁₆ "	27 ¹³ / ₁₆ "	53 ¹ / ₈ "
P-HOP-1.5	48 ⁵ / ₈ "	49 ⁵ / ₁₆ "	21 ⁵ / ₈ "	58 ¹⁵ / ₁₆ "	17 ³ / ₁₆ "	54 ¹ / ₄ "	17 ³ / ₄ "	21 ⁵ / ₈ "	33"	66 ³ / ₁₆ "	32 ³ / ₈ "	41 ¹⁵ / ₁₆ "	39 ¹³ / ₁₆ "	65 ¹¹ / ₁₆ "

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 signal words used appear below along with the meaning of each word:



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.

Each person who assembles, installs, uses, or maintains this product should read the entire manual and fully understand the directions in advance. If after reading the manual you do not understand an instruction, ask your supervisor or employer for clarification, because failure to adhere to the directions in this manual might result in serious personal injury.

Safe use recommendations:

Rev. 11/17/2015

Vestil strives to identify all hazards associated with the use of its products. However, material handling is inherently dangerous and no manual can address every risk. The most effect means for preventing injury is for the end-user to apply good judgment whenever using this hopper.

ADANGER Electrocution might result if any part of the product contacts electrified wires. DO NOT contact electrified wires with any part of your fork truck, the hopper or its contents.

Material handling is dangerous. Improper or careless operation might result in serious personal injuries.

- Failure to read & understand the instructions included in this manual before using or servicing the hopper is a misuse.
- DO NOT use a malfunctioning or structurally damaged hopper. Examples structural damage include: 1) damage to the hopper release mechanism (that allows the hopper to dump); 2) broken fork pocket(s); 3) main connection pin; or 4) broken welds. Inspect the hopper before each use according to the inspection instructions on p. 8. DO NOT use the hopper unless it passes every part of the inspection.
- DO NOT use the hopper if the safety chain is damaged or absent; DO NOT lift the hopper until it is securely connected to the carriage of the fork truck with the safety chain.
- DO NOT fill the hopper with a load weighing more than the maximum rated load (2,000 lb.).
- DO NOT stand beneath or travel under the hopper at any time. DO NOT permit any person to stand beneath or travel under the hopper.
- Hoppers with lifting lugs can be lifted with overhead hoists and cranes. DO NOT lift a hopper unless the chute is securely latched to the frame. The hopper must not be able to rotate while it is suspended.
- DO NOT allow people to ride on or in the hopper.
- DO NOT use the hopper if any product label (see p. 9) is unreadable, damaged, or missing. Contact Vestil to order replacement labels.
- ALWAYS apply proper (fork) lift truck operation practices learned during your training program. Before raising the hopper from the floor AND tilt the (forklift) mast toward the cab of the truck to ensure that the hopper will not slide towards the tips of the forks.
- DO NOT modify the hopper in any way! Modification(s) might make the hopper unsafe to use.
- DO NOT dump the hopper UNLESS every person in the vicinity is safely behind the forklift truck.
- DO NOT dump the hopper if the forklift is facing down a slope. Only dump the hopper while parked on a level surface.
- ALWAYS engage the caster brake when the hopper is stationary/not in use.

Caster brake:

Each P-HOP series hopper has 2 swiveling casters in back, one of which is equipped with a brake. To engage the brake, press the brake lever down. When the brake is engaged the wheel will not rotate. To disengage the brake, lift the brake lever up.

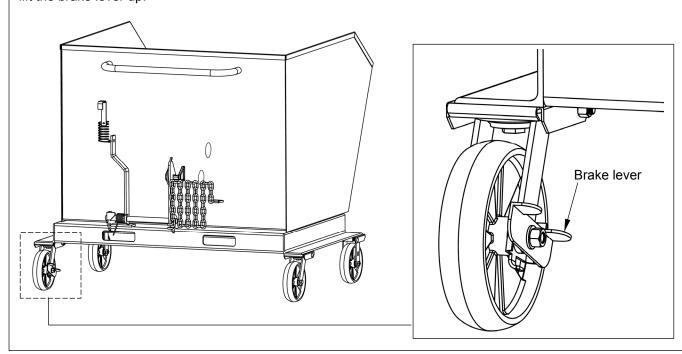
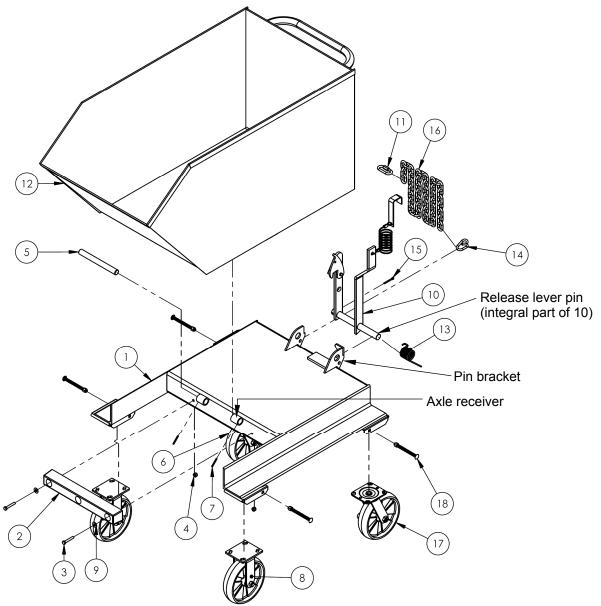
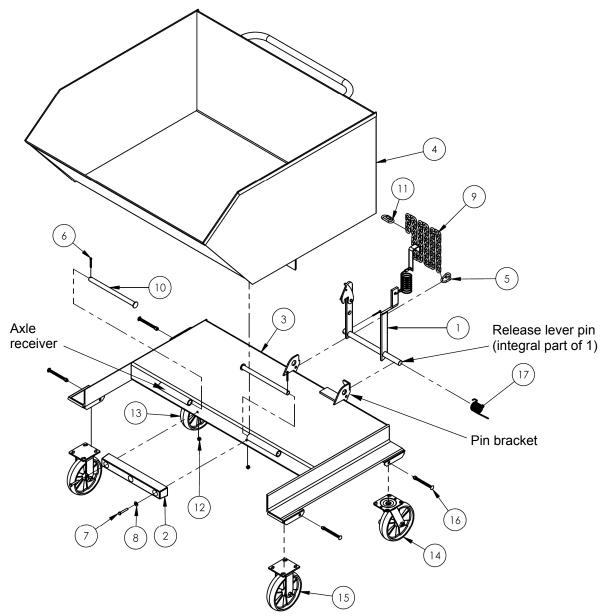


FIG. 1: P-HOP-0.5 exploded parts diagram and bill of materials



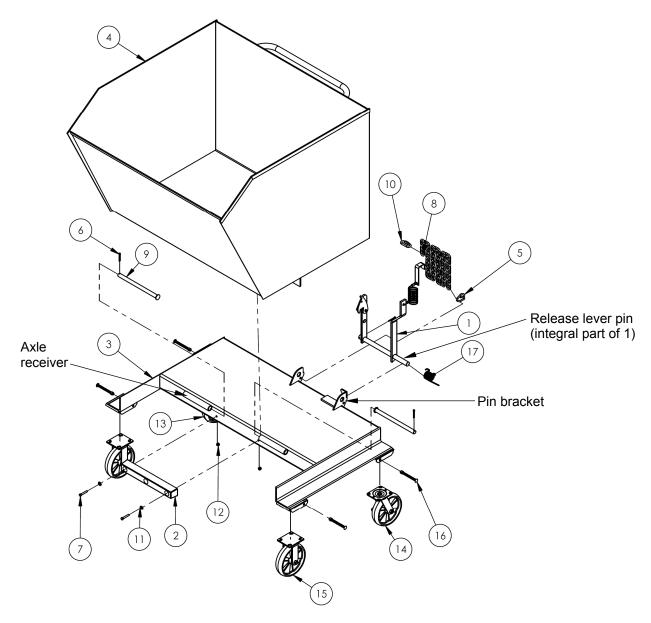
Item no.	Part no.	Description	Quantity
1	37-514-030	Frame, weldment, small, P-HOP	1
2	29-048-061	Bumper, rubber	1
3	11061	⁵ / ₁₆ " – 18 x 2" HHCS zinc-plated #2 bolt	2
4	37021	⁵ / ₁₆ " – 18 zinc-plated #2 lock nut	2
5	37-112-010	Pin, hinge axle	1
6	16-132-208	GFN-8/2-S caster	1
7	64137	$^{3}/_{16}$ " x $1^{1}/_{2}$ " spring pin	2
8	16-132-233	Caster, rigid	2
9	33006	⁵ / ₁₆ " zinc-plated USS flat washer	2
10	37-537-012	Lock release, lever assembly	1
11	99-145-053	⁵ / ₁₆ " quick link	1
12	37-545-010	Weldment, chute	1
13	37-146-005	Spring, torsion, hopper release	1
14	99-145-084	Lap link	1
15	65127	³ / ₁₆ " x 2" cotter pin	1
16	09-145-018	⁵ / ₁₆ " chain, 56" long	1
17	16-132-248	GFN-8/2-S-SWB	1
18	99-612-001	Pin, bulldog bolt and nut assembly	4

FIG. 2: P-HOP-1 exploded parts diagram and bill of materials



Item no.	Part no.	Description	Quantity
1	37-537-010	Weldment, lock release, lever assembly	1
2	29-048-061	Bumper, rubber	1
3	37-514-029	Frame, weldment, large, P-HOP	1
4	37-545-001	Weldment, chute	1
5	99-145-084	Lap link	1
6	65127	³ / ₁₆ " x 2" cotter pin	3
7	11061	⁵ / ₁₆ " – 18 x 2" HHCS zinc-plated #2 bolt	2
8	33006	⁵ / ₁₆ " zinc-plated USS flat washer	2
9	09-145-018	⁵ / ₁₆ " chain, 56" long	1
10	37-112-045	Pin, hinge axle	2
11	99-145-053	⁵ / ₁₆ " quick link	1
12	37021	⁵ / ₁₆ " – 18 zinc-plated #2 lock nut	2
13	16-132-208	GFN-8/2-S caster	1
14	16-132-248 GFN-8/2-S-SWB		1
15	16-132-233	Caster, rigid	2
16	99-612-001	Pin, bulldog bolt and nut assembly	4
17	37-146-005	Spring, torsion, hopper release	1

FIG. 3: P-HOP-1.5 exploded parts diagram and bill of materials



Item no.	Part no.	Description	Quantity
1	37-537-010	Lock release, lever assembly	1
2	29-048-061	Bumper, rubber	1
3	37-514-029	Frame, weldment, large, P-HOP	1
4	37-545-002	Weldment, chute	1
5	99-145-084	Lap link	1
6	65127	³ / ₁₆ " x 2" cotter pin	3
7	11061	⁵ / ₁₆ " – 18 x 2" HHCS zinc-plated #2 bolt	2
8	09-145-018	⁵ / ₁₆ " chain, 56" long	1
9	37-112-045	Pin, hinge axle	2
10	99-145-053	⁵ / ₁₆ " quick link	1
11	33006	⁵ / ₁₆ " zinc-plated USS flat washer	2
12	37021	⁵ / ₁₆ " – 18 zinc-plated #2 lock nut	2
13	16-132-208	GFN-8/2-S caster	1
14	16-132-248	GFN-8/2-S-SWB	1
15	16-132-233	Caster, rigid	2
16	99-612-001	Pin, bulldog bolt and nut assembly	4
17	37-146-005	Spring, torsion, hopper release	1

Loading & use instructions:

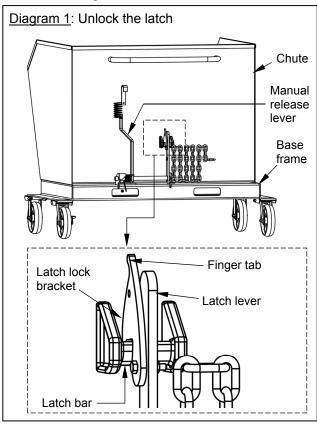
AWARNING Do not exceed the load rating or fill the hopper above the top of the sides. Serious personal injury (or property damage) could result from overloading the hopper.

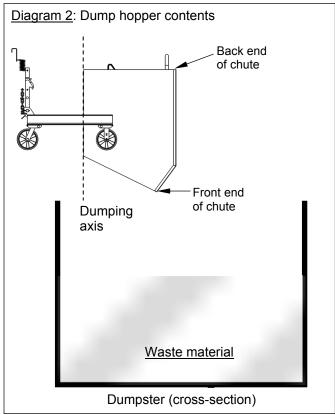
Loading

Verify that the hopper chute is latched to the base frame, i.e. NOT released and cannot rotate, before filling the chute with refuse. Standard P-HOP-series dumping hoppers are designed for indoor and outdoor use in most industrial and commercial settings. They should be used as a means for dumping non-hazardous refuse into larger trash receptacles. Whenever the hopper is stationary, engage the caster brake (see p. 3).

Use:

- 1. Mount the hopper on the forks of a lift truck and secure it in place with the safety chain. Wrap the free end of the chain around the lift carriage; then fasten the quick link to a link in the chain. The chain must be taut (no slack) to prevent the hopper from being able to slide on the forks.
- 2. Store the handle of the release cable within reach of the forklift operator, for instance, by hooking it to the frame of the forklift cab. Make sure that there is plenty of slack in the cable to avoid accidentally releasing the chute.
- 3. The chute cannot dump unless the latch is unlocked. To unlock the latch, pull the finger tab at the top end of the latch lock bracket until the bracket disengages the latch bar (see "Diagram 1" below).
- 4. Raise the hopper above the dumpster and drive forward until the dump axis is clearly over the inside of the dumpster as shown in Diagram 2 below.





- 5. Dump the contents of the hopper by releasing the chute. To release the chute, pull the release cable. The hopper will pivot about the dump axis and release the contents.
- **AWARNING** DO NOT wrap the release cable around your hand/fingers or attach the handle to your clothing!
- 6. Relatch the chute to the base.
 - a. Manually: slowly lower the forks until the hopper rests on the ground. The chute will pivot towards the frame. Press the back end of the chute onto the base until the latch lever engages the latch bar (see Diagram 1).
 - b. Use the side of the dumpster: raise the fork tips by tilting the forklift mast toward the cab. Then, back away from the dumpster. Slowly lower the forks until the front end of the chute contacts to top of the dumpster. Continue to slowly lower the forks until the chute pivots onto the base frame. You should hear the latch lever snap over the latch bar. Confirm that the chute is securely latched by raising the forks. The chute should not rotate. If necessary, lower the forks completely and manually latch the chute to the frame.
 - 7. Lock the latch by reversing the process of step 3 (above). DO NOT move the hopper until the latch is locked!

Inspections & Maintenance:

AWARNING If an inspection reveals issues, restore the hopper to normal operating condition BEFORE using it again. DO NOT use a structurally damaged hopper. Structural damage includes, but is not limited to, cracked welds, warping or deformation of the chute, pivot points, or the supporting frame, particularly the fork pockets.

Inspections [refer to exploded parts diagrams on pp. 4-6]:

- (A) Before each use inspect the following components:
 - 1.) Release cable look for fraying, birdcaging, thinning.
 - 2.) Hopper chute or base frame check for damage, deformation, corrosion or severely rusted regions.
 - 3.) Pivot points as the chute rotates (after releasing it), listen for unusual noise and watch for binding as the chute rotates. Also look for distortion of the axle pins or axle receivers.
 - 4.) Release/Latch mechanisms test the chute release mechanism ("lock release, lever assembly"). The torsion spring should cause the lever assembly to automatically recoil and firmly latch the chute to the frame.
 - 5.) Safety chain check the chain for damaged links (broken, cracked, elongated).
- (B) Inspect the following components at least once per month. Replace any component that is excessively worn or no longer operates normally:
 - 1.) Pivot points look for excessive wear, warping, or other damage to the release lever pin, pin brackets, axles pins, and axle receivers. Listen for unusual noises and watch for irregular movement. Remove dirt and debris from areas that could affect the hopper's dumping motion.
 - 2.) Fasteners (bolts, nuts, axle pins, cotter pins, retaining rings) inspect for looseness and wear.
 - 3.) Casters check for looseness, excessive wear, or damage to the casters, caster bearings, mounting brackets, and hardware. Confirm that the brake functions properly.
 - 4.) Release mechanism verify that the mechanisms function properly: 1) torsion spring firmly latches the lock release lever assembly ("lever assembly") to the chute; 2) the latch lock bracket should seat on the latch bar unless manually disengaged (see "Diagram 1" on p. 7); 3) lever assembly pivots smoothly and securely engages the latch bar.
 - 5.) Chute examine the chute. The structure should be rigid and square without corroded holes or severely rusted areas.
 - 6.) Supporting frame examine the frame. It should be rigid and square, welds should be intact, and fork pockets should be square and sound.
 - 7.) Labels all labels must be applied to the hopper in the locations shown in the "Labeling diagram" on p. 9.

Maintenance:

Implement a maintenance program to ensure that the product functions properly.

- Step 1: Tag the hopper, "Out of Service."
- Step 2: Remove dirt and debris from all surfaces.
- <u>Step 3</u>: Conduct the scheduled inspection. If deformity, corrosion, rusting, or excessive wear of the frame or chute is discovered, remove it from service.
- Step 4: Perform all necessary adjustments, replacements and/or repairs, but DO NOT modify the hopper.

AWARNING The reader should understand the significant difference between necessary adjustments and repairs, and modifications. Adjustments are simple corrections that restore the hopper to normal operating condition, such as tightening loose fasteners, or removing dirt or other debris from the surface. Repairs involve removing worn parts and installing new/replacement parts.

A "modification" is a change that <u>alters the hopper from normal operating condition</u>, such as bending the frame or removing a part or several parts. <u>NEVER</u> modify the hopper. Modifications automatically void the Limited Warranty (p. 10) and might make the hopper unsafe to use.

<u>Step 5</u>: Make a dated record of any repairs, adjustments, and/or replacements.

Labeling diagram:

The hopper should always be labeled as shown in the diagram below. Replace any label that is damaged or not easily readable.



A: Label 375 (both sides)

AWARNING A ADVERTENCIA A AVERTISSEMENT

B: Label 220 (both sides)

AWARNING	ADVERTENCIA	A AVERTISSEMENT
KEEP CLEAR WHEN IN USE	MANTENGASE ALEJADO CUANDO SE ESTA OPERANDO	SE TENIR À DISTANCE LORS DU FONCTIONNEMENT 220 1011

C: Label 635 (both rear corners of chute)



D: Label 620

▲ WARNING	ADVERTENCIA	A AVERTISSEMENT			
DO NOT wrap release cable around hand	NO se envuelva el cable en la mano	NE PAS rouler câble de dégagement autour de la main			
STAY CLEAR of hopper when dumping	MANTENGASE ALJEADO del carrito cuando se este volcando	RESTER À L'ÉCART de la trémie pendant bennage			
VESTIL MANUFACTURING CORPORATION • 800-648-0868 • sales@vestil.com • www.vestil.com					

F: Label 208 (both sides & back)

<u>_</u> abooo	(DOLL) CIGOO OL DOCK	• /
▲WARNING	AADVERTENCIA	A AVERTISSEMENT
KEEP CLEAR OF PINCH POINT	MANTENGASE ALEJADO DEL PUNTO DE CORTE	SE TENIR À DISTANCE DU POINT DE PINCEMENT

E: Label 547 (P-HOP-1) 548 (P-HOP-1.5) 632 (P-HOP-0.5)

Model / Modelo / Modele	▲ WARNING	▲ ADVERTENCIA
P-HOP-	SECURELY ATTACH safety restraint to forklift Tilt load backwards to prevent	ASEGURE la cadena de seguridad a la transpaleta Vuelque la carga hacia atras para
Capacity / Capacidad / Capacite	hopper from sliding Distribute load evenly DO NOT exceed rated capacity Hopper MUST be locked	prevenir que el carrito resbale Distribuya la carga uniformemente NO exceda la capacidad de carga tasada El depósito de alimentación debe ser
kg Serial No. / Serie No. / Serie No.	when not dumping • Disengage lock on hopper release before dumping hopper	cerrado al no descargar • Suelte cerradura en la liberación de depósito de alimentación antes de descargar depósito de alimentación
	DO NOT wrap release cable around any body part 547 REV 1011	No envuelva cable de liberación alrededor de cualquier parte del cuerpo

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 *original* dynamic components: motors, hydraulic pumps, electronic controllers, switches and cylinders. It also covers defects in *original* parts that wear under normal usage conditions ("wearing parts"): bearings, hoses, wheels, seals, brushes, batteries, and the battery charger.

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>. 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 environments;
 - Inadequate or improper maintenance;
 - Damage sustained during shipping;
 - Collisions or other incidental contacts causing damage to 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 the terms of this Limited Warranty.

