

Vestil Manufacturing Corp.

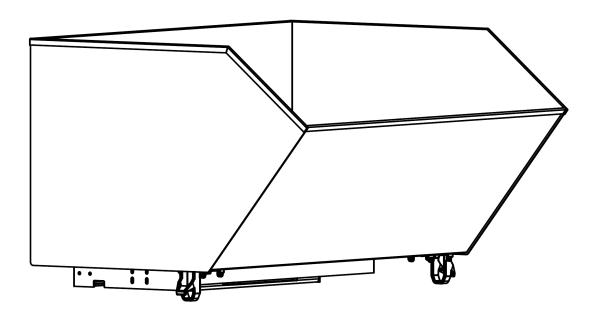
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H-Series Hoppers

Instruction 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 http://www.vestilmfg.com/parts info.htm.

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

Thank you for purchasing an H-series, self-dumping hopper made by Vestil Manufacturing Co. ("Vestil"). Our hoppers are durable, high-quality products that provide many safety-enhancing features. Standard H-series hoppers include (2) fork pockets, dump-actuating cable that allows the hopper to be dumped by the forklift driver without having to dismount the forklift, and either a safety chain or safety strap that attaches the hopper to the carriage of your fork truck. Dimensions, volume, and net weight of each model H hopper are provided in the following table.

Model	Volume	Uniform Maximum Rated Load	Overall Dimensions (W x D x H)	Distance between Fork Pocket Centers	Net Weight
H-series hop	pers (low profile 90	0° self-dumping steel)			
Light duty	(12 gauge steel)				
H-25-LD	½ yd ³	2,000 lb.	27" x 46 ¹ / ₈ " x 21 ¹¹ / ₁₆ "	11 ⁵ / ₈ "	167 lb.
	(0.19 m ³)	(909.1 kg)	(68.6 x 117.2 x 55.1)cm	(29.5 cm)	(75.9 kg)
H-50-LD	½ yd ³	2,000 lb.	27" x 51 ³ / ₁₆ " x 28 ¹ / ₈ "	11 ⁵ / ₈ "	256 lb.
	(0.38 m ³)	(909.1 kg)	(68.6 x 130.0 x 71.4)cm	(29.5 cm)	(116.4 kg)
H-100-LD	1 yd ³	2,000 lb.	51" x 51 ³ / ₁₆ " x 28 ¹ / ₈ "	21 ⁵ / ₈ "	347 lb.
	(0.76 m ³)	(909.1 kg)	(129.5 x 130.0 x 71.4)cm	(55 cm)	(157.7 kg)
H-150-LD	1½ yd³	2,000 lb.	48 ⁵ / ₈ " x 51 ¹³ / ₁₆ " x 40 ¹ / ₄ "	21 ⁵ / ₈ "	377 lb.
	(1.15 m³)	(909.1 kg)	(123.5 x 131.6 x 102.2)cm	(55cm)	(171.4 kg)
Medium du	ıty (10 gauge steel)			
H-25-MD	½ yd ³	4,000 lb.	27" x 46 ¹ / ₈ " x 21 ¹¹ / ₁₆ "	11 ⁵ / ₈ "	229 lb.
	(0.19 m ³)	(1,818 kg)	(68.6 x 117.2 x 55.1)cm	(29.5 cm)	(104.1 kg)
H-50-MD	½ yd ³	4,000 lb.	27" x 51 ³ / ₁₆ " x 28 ³ / ₈ "	11 ⁵ / ₈ "	276 lb.
	(0.38 m ³)	(1,818 kg)	(68.6 x 130.0 x 72.1)cm	(29.5 cm)	(125.5 kg)
H-100-MD	1 yd ³	4,000 lb.	51" x 51 ³ / ₁₆ " x 28 ¹ / ₈ "	21 ⁵ / ₈ "	395 lb.
	(0.76 m ³)	(1,818 kg)	(129.5 x 130.0 x 71.4)cm	(55 cm)	(179.5 kg)
H-150-MD	1½ yd³	4,000 lb.	48 ³ / ₄ " x 51 ¹³ / ₁₆ " x 40 ¹ / ₄ "	21 ⁵ / ₈ "	463 lb.
	(1.15 m³)	(1,818 kg)	(123.8 x 131.6 x 102.2)cm	(55 cm)	(210.5 kg)
Heavy duty	y (8 gauge steel)				
H-25-HD	½ yd ³	6,000 lb.	27" x 46 ¹ / ₈ " x 21 ¹¹ / ₁₆ "	11 ⁵ / ₈ "	216 lb.
	(0.19 m ³)	(2,727 kg)	(68.6 x 117.2 x 55.1)cm	(29.5 cm)	(98.2 kg)
H-50-HD	½ yd ³	6,000 lb.	27" x 51 ¹ / ₄ " x 28 ³ / ₁₆ "	11 ⁵ / ₈ "	279 lb.
	(0.38 m ³)	(2,727 kg)	(68.6 x 130.2 x 71.6)cm	(29.5 cm)	(126.8 kg)
H-100-HD	1 yd ³	6,000 lb.	51" x 51 ¹ / ₄ " x 28 ³ / ₁₆ "	21 ⁵ / ₈ "	462 lb.
	(0.76 m ³)	(2,727 kg)	(129.5 x 130.2 x 71.6)cm	(55 cm)	(210 kg)
H-150-HD	1½ yd³	6,000 lb.	48 ⁷ / ₈ " x 51 ¹³ / ₁₆ " x 40 ¹ / ₄ "	21 ⁵ / ₈ "	540 lb.
	(1.15 m³)	(2,727kg)	(124.1 x 131.6 x 102.2)cm	(55 cm)	(245.5 kg)
H-200-HD	2 yd ³	6,000 lb.	67" x 56 ⁹ / ₁₆ " x 38 ¹¹ / ₁₆ "	21 ⁵ / ₈ "	578 lb.
	(1.52 m ³)	(2,727kg)	(124.1 x 131.6 x 102.2)cm	(55 cm)	(262.7 kg)

Options		
Model	Description	Net Weight
H-DAMP-4	Hopper dumping speed regulator for 4,000lb (medium duty) models	30 lb. (13.6 kg)
H-DAMP-6	Hopper dumping speed regulator for 6,000lb (heavy duty) models	40 lb. (18.2 kg)
LEKP	"Leak proof" welded hopper	5 lb. (2.3 kg)
*H-DPLG-75	³ / ₄ " drain plug option	2 lb. (0.9 kg)
*H-DPLG-2	2" drain plug option	2 lb. (0.9 kg)
LUG	4 welded lifting lugs (around perimeter of hopper mouth)	23 lb. (10.5 kg)

^{*}Ordering a drum plug option automatically upgrades hopper to include leak-proof chute welds.

SIGNAL WORDS

This manual uses SIGNAL WORDS to draw attention to uses of the product that could result in personal injuries, as well as the probable seriousness of those injuries. Other signal words call attention to uses likely to cause property damage. Signal words used in this manual appear below along with the definition of each word.

A DANGER

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.

▲WARNING

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

▲CAUTION

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



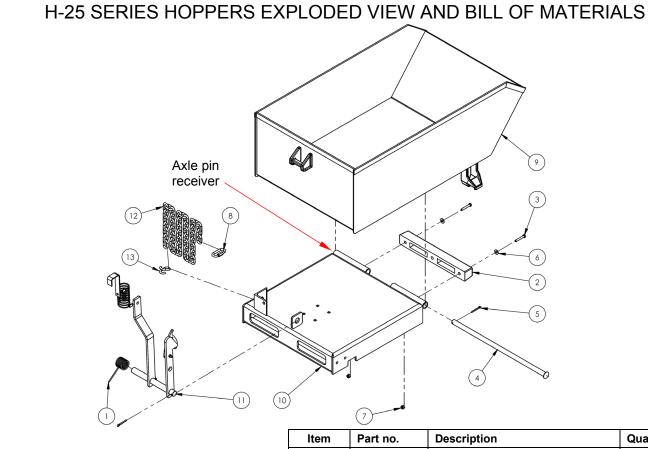
Identifies practices likely to result in product/property damage, such as operation that might damage the hopper.

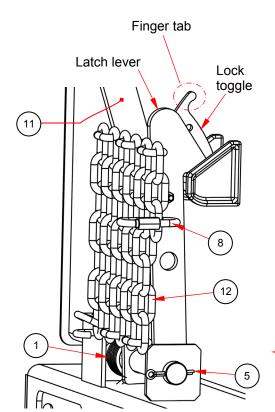
SAFETY INSTRUCTIONS

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.

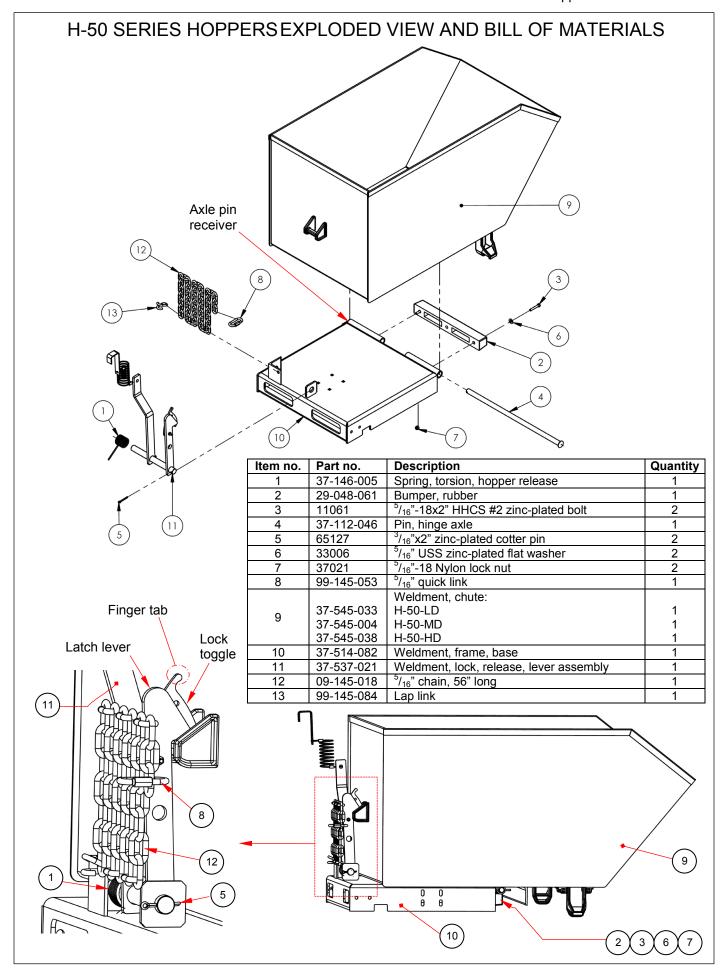
AWARNING Material handling is dangerous. Improper or careless operation might result in death or serious personal injuries.

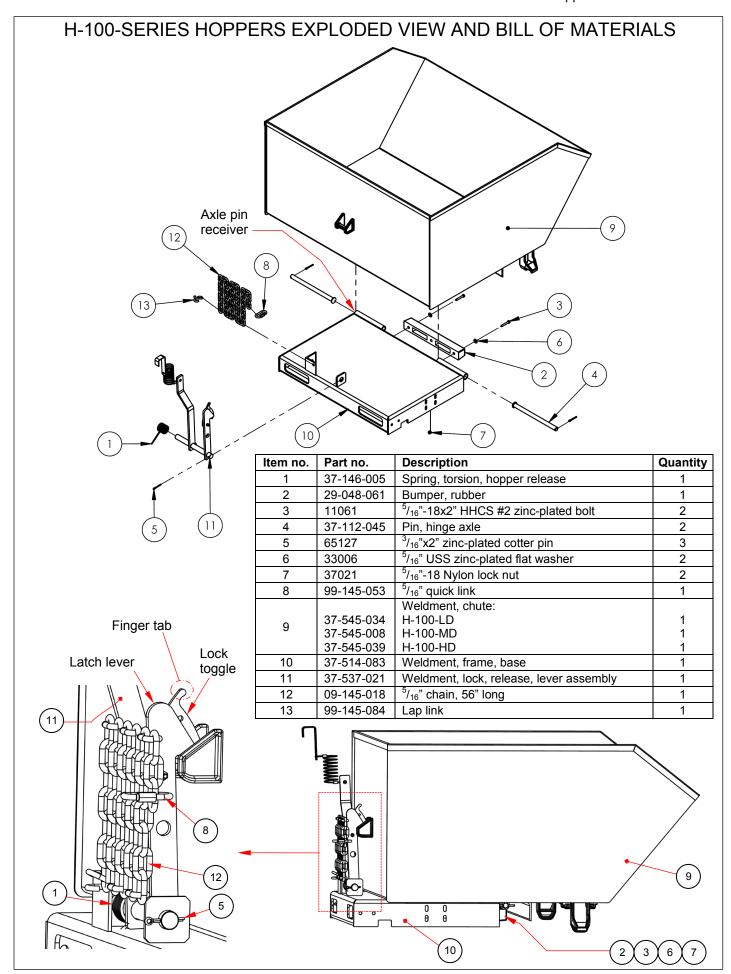
- Read & understand this entire manual before using or servicing the hopper.
- Inspect the hopper as directed in the INSPECTIONS & MAINTENANCE section on p. 10. DO NOT use the hopper unless it is in SATISFACTORY CONDITION. See RECORD OF SATISFACTORY CONDITION on p. 10.
- DO NOT use the hopper if the carriage chain is damaged or missing; DO NOT lift the hopper until it is securely connected to the carriage of the fork truck with the carriage chain. ONLY use this hopper with a powered forklift truck. DO NOT mount the hopper on stackers or manually propelled lift trucks.
- DO NOT fill the hopper with a load weighing more than its maximum rated load. See SPECIFICATIONS tables on page 2.
- NO ONE should travel under the hopper at any time while it is elevated.
- NEVER wrap the release cable around your hand, fingers, or any other part of your body!
- **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.
- DO NOT allow people to ride on or in the hopper.
- DO NOT use the hopper if any label is unreadable or missing. Apply replacement labels before returning the hopper to service. See *LABELING DIAGRAM* on p. 11.
- ALWAYS apply proper lift truck operation techniques learned during your training program. Before raising the hopper from the floor, tilt the (forklift) mast toward the cab of the truck to ensure that the hopper will not slide off of the forks.
- DO NOT modify the hopper in any way without first obtaining express, written authorization! Unauthorized modifications might make the hopper unsafe to use and automatically void the *LIMITED WARRANTY* on p. 12.
- DO NOT dump the hopper UNLESS every person in the vicinity moves to a safe location away from the dumping site.
- DO NOT dump the hopper if the forklift is on sloped terrain. Only dump the hopper while on level surfaces.
- Do not exceed the load ratings or fill the hopper above the side walls. Injury to personnel or permanent damage to the equipment could result from overloading.

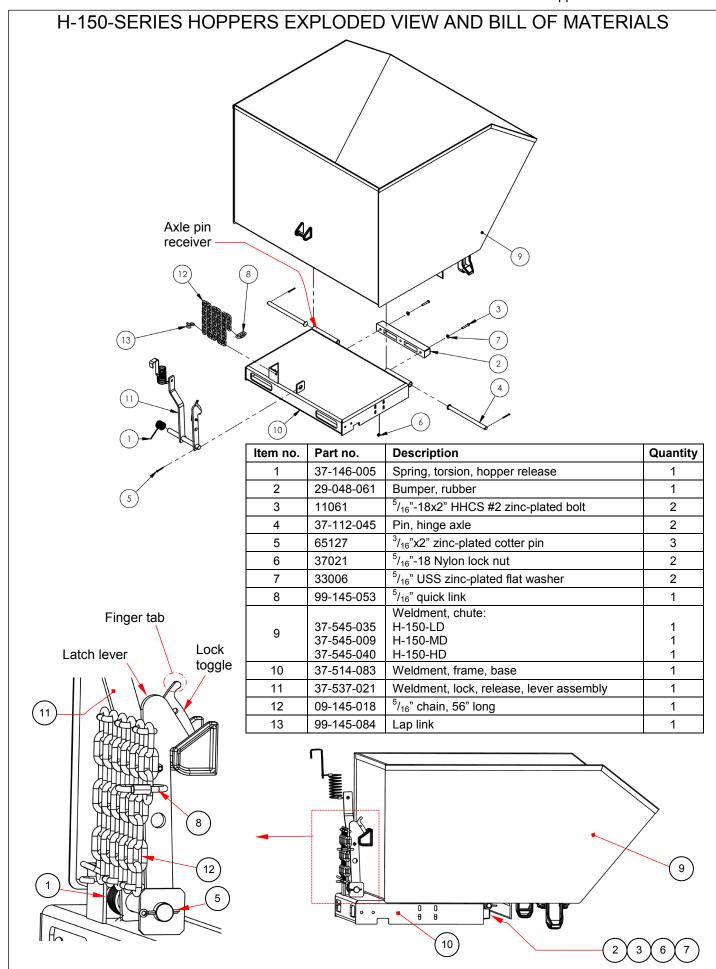




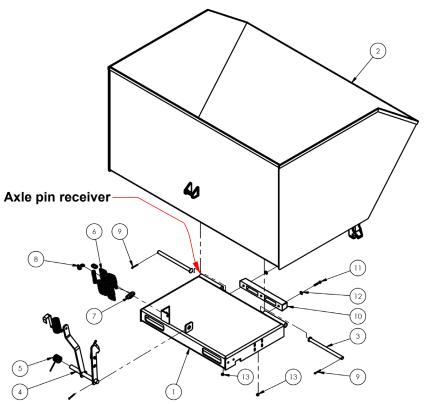
Item	Part no.	Description	Quantity
1	37-146-005	Spring, torsion, hopper release	1
2	29-048-061	Bumper, rubber	1
3	11061	⁵ / ₁₆ " – 18 x 2" HHCS #2 zinc-plated bolt	2
4	37-112-046	Pin, hinge axle	1
5	65127	³ / ₁₆ " x 2" zinc-plated cotter pin	2
6	33006	⁵ / ₁₆ " USS zinc-plated flat washer	2
7	37021	⁵ / ₁₆ "-18 Nylon lock nut	2
8	99-145-053	⁵ / ₁₆ " quick link	1
9	37-545-032 37-545-003 37-545-037	Weldment, chute: H-25-LD H-25-MD H-25-HD	1 1 1
10	37-514-082	Weldment, frame, base	1
11	37-537-021	Weldment, lock, release, lever assembly	1
12	09-145-018	⁵ / ₁₆ " chain, 56" long	1
13	99-145-084	Lap link	1



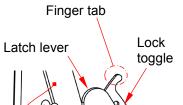


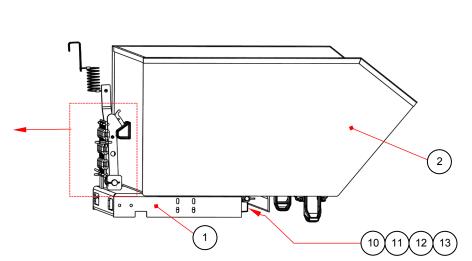


H-200-HD EXPLODED VIEW AND BILL OF MATERIALS



Item no.	Part no.	Description	Quantity
1	37-514-083	Weldment, frame, base	1
2	37-545-137	Weldment, chute	1
3	37-112-045	Pin, hinge axle	2
4	37-537-021	Weldment, lock, release lever assembly	1
5	37-146-005	Spring, torsion, hopper release	1
6	09-145-018	Chain, ⁵ / ₁₆ " x 56"	1
7	99-145-053	⁵ / ₁₆ " quick link	1
8	99-145-084	Lap link	1
9	65127	Cotter pin, zinc plated, ³ / ₁₆ " x 2"	3
10	29-048-061	Bumper, rubber	1
11	11061	Bolt, HHCS, gr. 2, zinc-plated, ⁵ / ₁₆ " – 18 x 2"	2
12	33006	Flat washer, zinc plated, USS, 5/16"	2
13	37021	Nylon insert lock nut, gr. 2, zinc finish, ⁵ / ₁₆ " – 18	2





LOADING THE CHUTE

Verify that the hopper chute is securely latched and locked to the base frame before filling it with refuse. Standard H-series self-dumping hoppers are suitable for use indoors and outdoors and in most industrial and commercial settings. They are designed for use with rider forklift trucks. Use the hopper to collect and dump non-hazardous wastes.

USING THE HOPPER

These hoppers have a low profile and rotate through a 90° dump angle. To dump the hopper chute, a forklift operator must simply unlock the release lever and pull the release cable.

<u>Step 1</u>: Mount the hopper on the forks of your lift truck. Drive forward until the forks contact the ends of the fork slots. Securely attach the hopper to the fork carriage with the carriage chain by wrapping the free end of the chain around part of the carriage. Then, connect the quick link at the end of the chain to a link in the chain. There should be little to no slack in the chain.

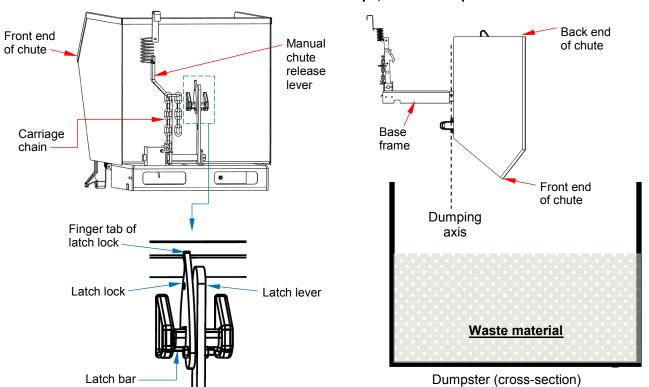
<u>Step 2</u>: Store the handle of the release cable within reach of the forklift operator. For example, the handle could be hooked to the frame of the roll cage.

NOTE: Make sure that there is slack in the cable. If the cable is taut, bumps or sudden stops while driving might cause the chute to be released.

<u>Step 3</u>: Raise the forks and tilt the mast back/towards the cab. Only raise the forks a few inches above the ground. Drive the forklift to the trash dumpster. Pull the finger tab until the latch lock disengages the latch bar. See diagrams included in Step 4 below. Elevate the hopper above the sides of the dumpster.

<u>Step 4</u>: Pull the release cable to release the chute and dump its contents. The chute will pivot about the dump axis. If necessary, tilt the mast forward/away from the cab while pulling the release cable to encourage the chute to dump.

AWARNING NEVER WRAP THE RELEASE CABLE AROUND ANY PART OF YOUR BODY, ESPECIALLY AN ARM OR HAND! When the chute dumps, the cable is pulled forward.



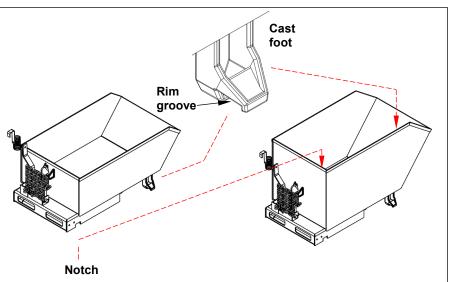
Step 5: Return the chute to the latched position. Tilt the forklift mast toward the cab; then back away from the dumpster. Lower the forks until the hopper contacts the ground; then slowly lower the forks the rest of the way to the ground until the chute latches to the base frame. Confirm that the chute is properly latched by raising the forks. The chute should not rotate. If necessary, lower the forks completely and manually latch the chute to the frame by pressing down on the back of the chute (see "H-series" diagram in Step 4). Alternatively, use the side of the dumpster to pivot the chute back onto the base frame.

Step 6: Lock the latch. Press the latch lock forward until it firmly engages the latch bar.

STACKING HOPPERS

H-series hoppers are designed to stack on top of each other. Notches in the base and rim grooves in specially designed cast feet of one hopper engage the rim of the hopper supporting it as shown in the diagram to the right.

Hoppers of identical width can be stacked together, i.e. H-25 and H-50 series hoppers stack together. H-100 and H-150 series hoppers also stack together. Always unload hoppers before stacking them and NEVER create stacks of more than 3 hoppers. The bottom hopper must not be equipped with casters.



AWARNING DO NOT move stacked hoppers! Only move one hopper at-a-time by properly mounting it to your forklift as described in Step 1 on p. 9. All hoppers must be empty whenever they are stacked.

RECORD OF SATISFACTORY CONDITION

Before using this hopper for the first time, create a record OF its appearance and features. Include descriptions of the chute, feet, base, carriage chain and quick link, pivot points and pivot point hardware, and the chute release mechanism. Release the chute. Describe how the unit looks and sounds as the chute rotates. Also describe the force necessary to release the chute using both the manual release lever and the cable. Secure the chute to the base and describe how the latch mechanism works. Thoroughly photograph the unit including all labels. Collate all writings and photographs into a single file. This file is a record of the unit in satisfactory condition. Compare your results of all inspections to this record to determine if the unit is still in satisfactory condition. Restore the hopper to satisfactory condition BEFORE using it again. Purely cosmetic changes, like damaged surface coating (paint or powdercoat) are not changes from satisfactory condition. However, touchup paint should be applied as soon as damage occurs to prevent rusting.

INSPECTIONS & MAINTENANCE

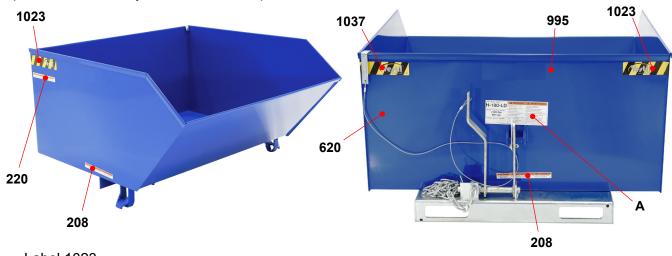
At least once per month, tag the unit out of service. Inspect the hopper to determine if it is in satisfactory condition. Compare your observations with the *RECORD OF SATISFACTORY CONDITION*. Replace all items that cannot be repaired. Always err on the side of caution. If you are uncertain whether a component should be replaced or if the unit should be used, contact *TECHNICAL SERVICE*.

Make a dated record of the inspection that includes all observations and described repairs and/or replacements made.

- 1.) Pivot points: Look for excessive wear, warps, or other damage to pivot pins, cotter pins, and pin receivers.
- 2.) <u>Hopper chute and base frame</u>: Examine the structure for damage, deformations, and corroded or excessively rusted areas.
- 3.) <u>Hardware (bolts, nuts, pins, cotter pins, retaining rings)</u>: inspect hardware for looseness and severe wear. Tighten loose connections and replace all damaged hardware.
- 4.) <u>Casters (if hopper is equipped with caster kit)</u>: check for looseness, excessive wear, or damage to the casters, caster bearings, mounting brackets, and hardware.
- 5.) Release mechanism: the torsion spring should cause the latch lever to automatically recoil and the lever should firmly engage the release lock bar. Check the release cable for fraying, thinning, and bird-caging regions.
- 6.) <u>Moving parts</u>: listen for unusual noises and watch for irregular movement. Remove dirt and debris from areas that could affect the hopper's dumping motion.
- 7.) <u>Carriage chain</u>: examine the carriage chain, its point of attachment to the base frame, and the quick links for damage.
- 8.) Labels: all labels must be firmly affixed in the locations shown in the LABELING DIAGRAM on p. 11.

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 on p. 9. Make sure that your record includes a photograph of each label. Replace all labels that are, or later become, damaged, missing, or not easily readable (e.g. faded). To order replacement labels, contact the *Parts Department* online at http://www.vestilmfg.com/parts_info.htm. Alternatively, you may call (260) 665-7586 and ask the operator to connect you to the *Parts Department*.







Label 1037

▲ CAUTION	▲ ATENCIÓN	▲ ATTENTION	
DO NOT PLAY ON OR AROUND	NO JUEGE ALREDEDOR	NE PAS JOUER SUR OU AUTOUR DE L'UNITÉ	(Vertiling and the second seco

Label 620: Left side in line with release handle

DO NOT wrap release cable around hand. Severe injury or amputation might occur if cable wrapped around body part when chute dumped. STAY CLEAR of hopper when dumping. DO NOT hook manual release handle on hopper when using bumper release. Each person who uses this hopper should

have access to the user manual. Copies of the manual can be downloaded from www.vestil.com ADVERTENCIA NO AGARRAR el cable con la mano.

Puede causar un daño severo o amputacion si el cable se envuelve alrededor del cuerpo al estar descargando la tolva.

MANTENTE ALEJADO de la tolva al descargar. Nunca agarrar el gancho de la tolva. Cada persona que use la tolva debe de usar el manual, las copias se pueden descargar de la direccion www.vestil.com.

Label 208

▲ WARNING	AADVERTENCIA	A AVERTISSEMENT
KEEP CLEAR OF	MANTENGASE ALEJADO DEL	SE TENIR À DISTANCE DU
PINCH POINT	PUNTO DE CORTE	POINT DE PINCEMENT

Label 220

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

Label 995

▲WARNING	▲ ADVERTENCIA
DO NOT use this product to lift or transport people.	NO use este producto para transportar o elevar personas.

A: Model specific label: See tables below

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

Model	Label
H-25-LD	627
H-25-MD	549
H-25-HD	538
H-50-LD	629
H-50-MD	535
H-50-HD	628

Model	Label
H-100-LD	533
H-100-MD	536
H-100-HD	539
H-150-LD	534
H-150-MD	537
H-150-HD	590
H-200-HD	1093

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, electronic controllers, switches, 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>1 year</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) are responsible for paying labor costs and freight costs to return the product to Vestil for warranty service.

Events that automatically void the 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.

