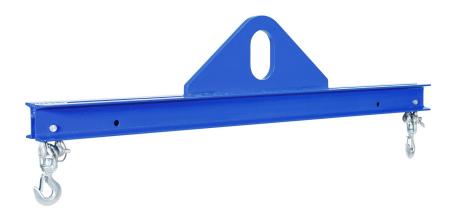


# Vestil Manufacturing Corp.

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: info@vestil.com

# SBM-Series Economy Spreader Beams 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 <a href="http://www.vestilmfg.com/parts">http://www.vestilmfg.com/parts</a> info.htm.

#### **Electronic copies of Instruction Manuals**

Additional copies of this instruction manual may be downloaded from <a href="https://www.vestil.com/page-manuals.php">https://www.vestil.com/page-manuals.php</a>.

Table of Contents	
Signal Words	2
Safety Instructions2	<b>-3</b>
lational Standards	
Record of Satisfactory Condition	
oad Tests	
Specifications	
BBM-10 Exploded View, Bill of Materials, & Specifications	
SBM-20 Exploded View, Bill of Materials, & Specifications	
SBM-40 Exploded View, Bill of Materials, & Specifications	6
SMB-60 Exploded View, Bill of Materials, & Specifications	
Jsing the Lifter	8
nspections & Maintenance	
abeling Diagramabeling Diagram	9
imited Warranty	

# 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.



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.



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.

**AWARNING** Material handling is dangerous and could result in serious personal injuries or death.

- Read and understand the entire manual before using or servicing this lifter. 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.
- This lifting device must only be used by designated persons and lifting device inspectors. Maintenance and test personnel should only use this device when necessary to perform their duties.
- DO NOT use this lifter if it is damaged, malfunctioning, or missing parts.
- DO NOT modify the product in any way without first obtaining written approval from Vestil. Unapproved modifications automatically void the *LIMITED WARRANTY* and might make the product unsafe to use.
- Only attach the lifter to a properly functioning safety hook, i.e. a hook with a spring latch.
- DO NOT remove or obscure any label. Confirm the placement and legibility of all labels as shown in the *LABELING DIAGRAM* on p. 9. DO NOT use this device UNLESS all labeling is readable and undamaged.
- Inspect the lifter before each use. See INSPECTIONS AND MAINTENANCE on p. 9.
- Review safety messages in the manuals for your crane, trolley, hoist, rigging, and all other devices used in conjunction with this spreader beam.
- Tighten the shackle pins before each use. See "Hook with Shackle" in Exploded Views on p. 4, 5, 6, & 7.
- Make sure your travel path is clear before picking up a load.
- DO NOT use this lifter to move a load item if the item does not balance when it is elevated. The beam should be horizontal/level when the load is elevated.
- DO NOT lift more than 1 item at a time.
- DO NOT lift people. This device must only be used to lift materials.
- Center the hoist above the load item before connecting it to a load. Centering minimizes load swing as the load lifts off of the ground. DO NOT side load the hoist/lifter.
- DO NOT sit, or ride, on the load item or the lifter.
- DO NOT exceed the rated load/capacity of your lifter. Capacity figures are provided in *SPECIFICATIONS* tables on p. 4, 5, 6, and 7, as well as on product labeling. See *LABELING DIAGRAM* on p. 9.
- Carefully eliminate slack in the hoist line and rigging before raising the load. Lift and lower loads slowly and steadily. Avoid jolting the loads.
- Slowly raise the loaded lifter a few inches above the ground to determine whether the load is stable.
- DO NOT lift a load higher than necessary. See *USING THE LIFTER* on p. 8. Keep the suspended load as close to the ground as possible while moving it and avoid obstructions.
- Avoid contact with the load item while it is suspended. DO NOT get in front of or behind a suspended load. Avoid putting your feet and other parts of your body beneath the load item. NEVER lift material over yourself or other people.
- Watch the load carefully while lifting and moving it. The load could swing or spin while elevated.

# **AWARNING** [Continued from p. 2.]

- DO NOT leave a suspended load unattended.
- DO NOT pull, drag, or slide loads with the lifter.

## NATIONAL STANDARDS

This product is a "Below-the-Hook Lifting Device" (BTH lifter). <u>ASME standard B30.20</u> (the "Standard") applies to BTH lifters. Acquire a copy of the latest version of the Standard before putting the lifter into service. Follow all use and maintenance/care instructions provided in the Standard as well as all other provisions for owners and users. If content in this manual conflicts with any recommendation or mandatory provision in the Standard, apply the provision from the Standard. Vestil encourages you to immediately contact *TECHNICAL SERVICE* if you discover any conflicts.

## RECORD OF SATISFACTORY CONDITION

Record the condition of the lifter before putting it into service. Measure the length and width of the shackle. Record your measurements. Thoroughly photograph the unit from multiple angles. Include close range photos of all labeling, the lifting shackle, the lifting arm, fasteners (pins, bolts, nuts, etc.), cable attachment points, and welds. Collate all photographs and writings into a single file. Mark the file appropriately to identify it. Measure the throat opening of both hooks. Document the measurements. This record is documentation of the lifter in satisfactory condition. Compare the results of all inspections to this record to determine whether the unit is in satisfactory condition. If the lifter 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, rusting/corrosion will alter the lifter from satisfactory condition and could make it unsafe to use.

## LOAD TESTS

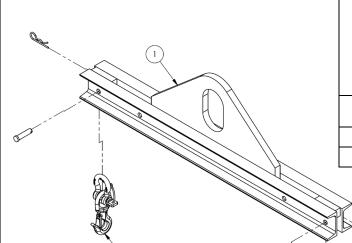
After creating a *RECORD OF SATISFACTORY CONDITION* and before using the lifter for the first time, a qualified person should conduct a load test. The test load should be 125% of the rated load of the lifter. The rated load of all CYL-P-LUG lifters is 800 pounds (363.6kg), so the test load should be 1000 pounds (454.5kg). Raise the lifter until it is suspended. Return the lifter to the ground and unload it. Perform a *Monthly Inspection* as described in *INSPECTIONS AND MAINTENANCE* (below). The lifter must undergo load testing immediately after it is repaired, modified, or altered.

## **SPECIFICATIONS**

Dimensions, net weight, and capacity information for each model is provided in the "Specifications" sections on pages 3, 4, 5, and 6. However, minor changes in product design might alter specifications, particularly dimensions and net weight. To provide instant access to up-to-date information, specifications documents for SBM-series spreader beams are available online to anyone who visits the Vestil website. appropriate specifications document by opening https://www.vestil.com/product.php?FID=571. Click the "Specifications" tab. Scroll the page to the entry for the specific model you purchased. 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 as soon as your product is delivered and keep it with your copy of this manual. If you encounter difficulties while trying to obtain a copy of the specifications document, contact *Technical Service*. Contact information is provided on the cover page of this manual. NOTE: Some models might be discontinued between revisions of this manual.

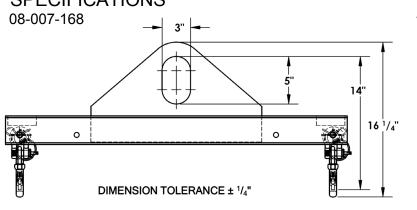
# EXPLODED VIEW & BILL OF MATERIALS: SBM-10 SERIES



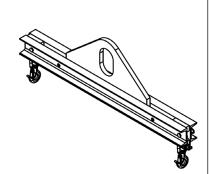


Item	Part no.	Description	Qty.
		Weldment, spreader beam	
	08-514-142	SBM-10-3	1
1	08-514-146	SBM-10-4	1
	08-514-150	SBM-10-6	1
	08-514-154	SBM-10-8	1
	08-514-158	SBM-10-10	1
	08-514-162	SBM-10-12	1
2	08-645-004	Subassembly, hook with	2
	00-045-004	shackle, 0.5 ton	2
3	45286	#11 hitch pin clip, <sup>1</sup> / <sub>8</sub> "x2 <sup>5</sup> / <sub>8</sub> "	2
4	28-112-040	Clevis pin, <sup>1</sup> / <sub>2</sub> "x2"	2





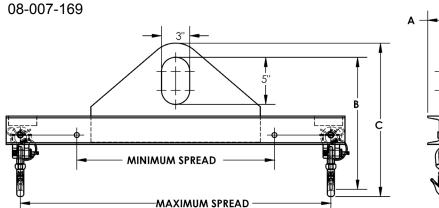




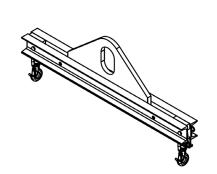
Model	Α	Minimum spread	Maximum spread	Capacity	Net weight
SBM-10-3	3 <sup>9</sup> / <sub>16</sub> "	21"	33"	1,000 lb.	56 lb.
	9.0cm	53.3 cm	83.8 cm	454.5 kg	25.5 kg
SBM-10-4	3 <sup>9</sup> / <sub>16</sub> "	33"	45"	1,000 lb.	64 lb.
	9.0cm	83.8 cm	114.3 cm	454.5 kg	29.1 kg
SBM-10-6	3 <sup>9</sup> / <sub>16</sub> "	45"	69"	1,000 lb.	82 lb.
	9.0cm	114.3 cm	175.3 cm	454.5 kg	37.3 kg
SBM-10-8	3 <sup>9</sup> / <sub>16</sub> "	69"	93"	1,000 lb.	98 lb.
	9.0cm	175.3 cm	236.2 cm	454.5 kg	44.5 kg
SBM-10-10	3 <sup>15</sup> / <sub>16</sub> "	93"	117"	1,000 lb.	140 lb.
	10.0cm	236.2 cm	297.2 cm	454.5 kg	63.6 kg
SBM-10-12	3 <sup>15</sup> / <sub>16</sub> "	117"	141"	1,000 lb.	162 lb.
	10.0cm	297.2 cm	358.1 cm	454.5 kg	73.6 kg

#### EXPLODED VIEW & BILL OF MATERIALS: SBM-20 SERIES 08-006-169 Item Part no. **Description** Qty. Subassembly, hook with 1 08-645-004 2 shackle, 0.5 ton 2 45286 #11 hitch pin clip, <sup>1</sup>/<sub>8</sub>"x2<sup>5</sup>/<sub>8</sub>" 2 Weldment, spreader beam 08-514-143 SBM-20-3 1 08-514-147 SBM-20-4 1 SBM-20-6 3 08-514-151 1 SBM-20-8 08-514-155 1 SBM-20-10 08-514-159 1 08-514-163 SBM-20-12 1 28-112-040 Clevis pin, <sup>1</sup>/<sub>2</sub>"x2"

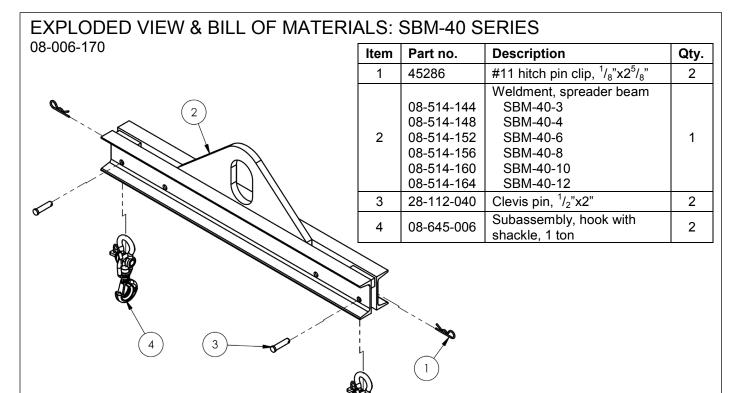
# **SPECIFICATIONS**



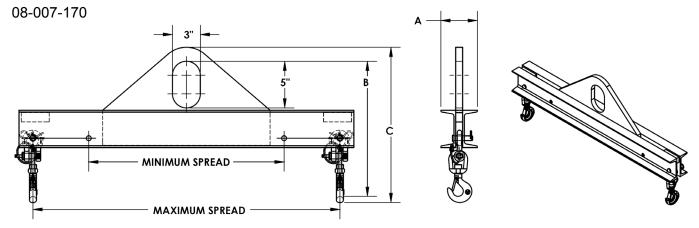




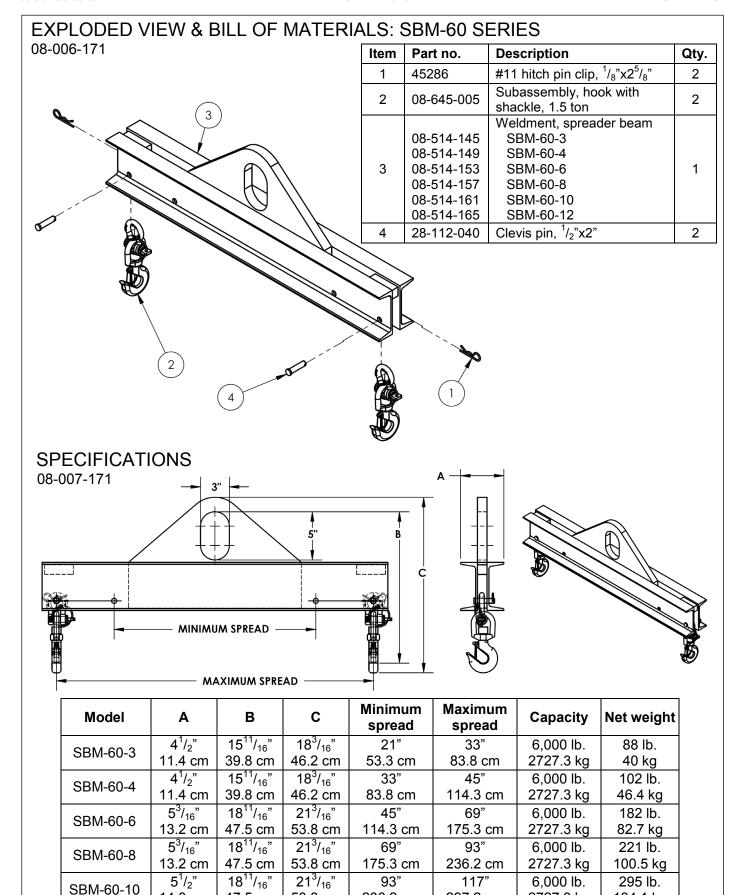
Model	Α	В	С	Minimum spread	Maximum spread	Capacity	Net weight
SBM-20-3	3 <sup>9</sup> / <sub>16</sub> "	14"	16 <sup>1</sup> / <sub>4</sub> "	21"	33"	2,000 lb.	56 lb.
3DIVI-20-3	9.0cm	35.6 cm	41.3 cm	53.3 cm	83.8 cm	909.1 kg	25.5 kg
SBM-20-4	3 <sup>9</sup> / <sub>16</sub> "	14"	16 <sup>1</sup> / <sub>4</sub> "	33"	45"	2,000 lb.	64 lb.
	9.0cm	35.6 cm	41.3 cm	83.8 cm	114.3 cm	909.1 kg	29.1 kg
SBM-20-6	3 <sup>15</sup> / <sub>16</sub> "	14"	16 <sup>1</sup> / <sub>4</sub> "	45"	69"	2,000 lb.	97 lb.
	10.0cm	35.6 cm	41.3 cm	114.3 cm	175.3 cm	909.1 kg	44.1 kg
SBM-20-8	3 <sup>15</sup> / <sub>16</sub> "	14"	16 <sup>1</sup> / <sub>4</sub> "	69"	93"	2,000 lb.	118 lb.
	10.0cm	35.6 cm	41.3 cm	175.3 cm	236.2 cm	909.1 kg	53.6 kg
SBM-20-10	4 <sup>1</sup> / <sub>4</sub> "	15"	17 <sup>1</sup> / <sub>4</sub> "	93"	117"	2,000 lb.	170 lb.
	10.8cm	38.1 cm	43.8 cm	236.2 cm	297.2 cm	909.1 kg	77.3 kg
SBM-20-12	4 <sup>1</sup> / <sub>4</sub> "	15"	17 <sup>1</sup> / <sub>4</sub> "	117"	141"	2,000 lb.	197 lb.
	10.8cm	38.1 cm	43.8 cm	297.2 cm	358.1 cm	909.1 kg	89.5 kg



# **SPECIFICATIONS**



Model	Α	В	С	Minimum spread	Maximum spread	Capacity	Net weight
SBM-40-3	3 <sup>15</sup> / <sub>16</sub> "	14 <sup>3</sup> / <sub>8</sub> "	16 <sup>9</sup> / <sub>16</sub> "	21"	33"	4,000 lb.	64 lb.
	10.0 cm	36.5 cm	42.1 cm	53.3 cm	83.8 cm	1,818.2 kg	29.1 kg
SBM-40-4	3 <sup>15</sup> / <sub>16</sub> "	14 <sup>3</sup> / <sub>8</sub> "	16 <sup>9</sup> / <sub>16</sub> "	33"	45"	4,000 lb.	75 lb.
	10.0 cm	36.5 cm	42.1 cm	83.8 cm	114.3 cm	1,818.2 kg	34.1 kg
SBM-40-6	4 <sup>1</sup> / <sub>4</sub> "	15 <sup>3</sup> / <sub>8</sub> "	17 <sup>9</sup> / <sub>16</sub> "	45"	69"	4,000 lb.	117 lb.
	10.8 cm	39.1 cm	44.6 cm	114.3 cm	175.3 cm	1,818.2 kg	53.2 kg
SBM-40-8	4 <sup>13</sup> / <sub>16</sub> "	18 <sup>3</sup> / <sub>8</sub> "	20 <sup>9</sup> / <sub>16</sub> "	69"	93"	4,000 lb.	193 lb.
	12.2 cm	46.7 cm	52.2 cm	175.3 cm	236.2 cm	1,818.2 kg	87.7 kg
SBM-40-10	5 <sup>3</sup> / <sub>16</sub> "	18 <sup>3</sup> / <sub>8</sub> "	20 <sup>9</sup> / <sub>16</sub> "	93"	117"	4,000 lb.	258 lb.
	13.2 cm	46.7 cm	52.2 cm	236.2 cm	297.2 cm	1,818.2 kg	117.3 kg
SBM-40-12	5 <sup>3</sup> / <sub>16</sub> "	18 <sup>3</sup> / <sub>8</sub> "	20 <sup>9</sup> / <sub>16</sub> "	117"	141"	4,000 lb.	297 lb.
	13.2 cm	46.7 cm	52.2 cm	297.2 cm	358.1 cm	1,818.2 kg	135.0 kg



SBM-60-12

14.0 cm

 $5^{1}/_{2}$ "

14.0 cm

47.5 cm

18<sup>11</sup>/<sub>16</sub>"

47.5 cm

236.2 cm

117"

297.2 cm

297.2 cm

141"

358.1 cm

2727.3 kg

6,000 lb.

2727.3 kg

53.8 cm

 $21^3/_{16}$ "

53.8 cm

134.1 kg

341 lb.

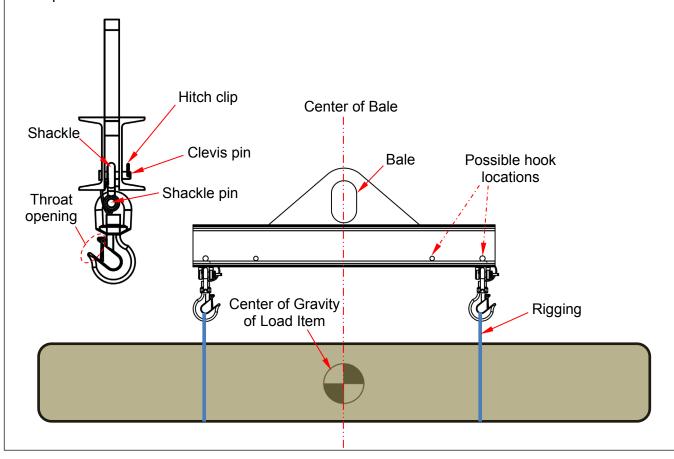
155 kg

## USING THE LIFTER

The capacity of the hoist, crane, and rigging should equal or exceed the capacity of the spreader beam. DO NOT exceed the capacity of the lifter, crane, rigging, or the hoist, whichever is smallest.

Load the lifter by applying the following steps:

- 1. Tighten both shackle pins.
- 2. Attach the hoist hook to the bale of the spreader beam. Makes sure that the hoist is centered above the bale, i.e. the hoist chain/rope must be vertical.
- 3. Move the beam into position above the load item. Center the bale/crane hook above the load's center of gravity.
- 4. Attach rigging to the load item.
- 5. Adjust the positions of the load hooks. Rigging should be vertical when attached to the hooks. To change the position of a hook, remove the hitch clip from the clevis pin; then remove the clevis pin. Move the hook and shackle to the necessary location and reinstall the clevis pin. Secure the clevis pin with its hitch clip. Select the appropriate location of the hook and reattach the shackle. Generally, the hooks should be attached in the same locations on either side of the bale. If the load item and beam are not level when the **test lift** is performed (step 7 below), the center of gravity of the load item is on the low side of the item instead of being directly below the bale. Relocate the hooks and rigging to position the center of gravity of the load directly below the center of the bale.
- 6. Connect the rigging to the load hooks (of the beam).
- 7. Perform a **test lift**. Raise the load just a few inches above the ground. The load and beam should balance, i.e. be horizontally level. If one end of the load is lower than the other, return the load to the ground. Reposition hooks and rigging as necessary to balance the load. When balanced, the spreader beam and load item are horizontal.



#### **INSPECTIONS & MAINTENANCE**

Inspection procedures are included in the most current revision of ASME B30.20. As stated above in the *NATIONAL STANDARDS* section, Vestil recommends that you acquire a copy of the most recent revision of this standard. Apply all use and maintenance/care instructions in the standard. Vestil also recommends that you contact your local occupational safety and health authority to determine if any laws, regulations, codes, ordinances, etc. apply inspection requirements to below-the-hook lifters.

Inspections and repairs should only be performed by qualified persons. Compare the results of each inspection to the *RECORD OF SATISFACTORY CONDITION*. Do not use the lifter unless all parts are in satisfactory condition. Replace parts that are not in satisfactory condition before using the lifter again. **DON'T GUESS! If you have any questions about the condition of your lifter, contact the** *TECHNICAL SERVICE* **department.** The phone number is provided on the cover page of this manual. *Never make temporary repairs of damaged or missing parts*. Only use manufacturer-approved replacement parts. Deformities, cracks, and severe wear of the lifting arm or main body requires immediate replacement of the entire unit.

#### **Every lift**

The operator of this lifter must inspect the lifter every lift. Look for dirt or other surface debris. Clean the surfaces.

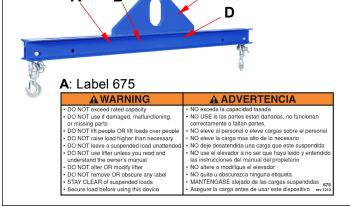
# **Monthly Inspections**

At least once per month a qualified person must perform the following inspections. Written reports should be prepared for every monthly inspection including inspections following *LOAD TESTS*.

- 1. Spreader frame assembly: Examine each pin hole for elongations and the surrounding metal for cracks, and severe rusting and corrosion. Pin holes should be smooth and circular; the frame should be square and rigid and should lack cracks, warps, regions weakened by severe rusting or corrosion, etc.
- 2. Pins: inspect all clevis pins and shackle pins. Confirm that pins are straight and without cracks, warps, etc.
- 3. Hooks and shackles (hardware): examine each hook and shackle for damage including significant wear, warping, cracks, or deformation. Measure the throat opening of each hook. Compare it to the measurements in the *RECORD*. The throat opening of each hook should not be 15 percent or more in excess of normal throat opening or be twisted more than 10° from the plane of the unbent hook.
- 4. Labeling: Labels should be readable and located as shown in the *LABELING DIAGRAM*. If a label(s) is unreadable or missing, contact Vestil to order a replacement.
- 5. Welds: Confirm that all welds are intact.

#### 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. Replace all labels that are damaged, missing, or not easily readable (e.g. faded). To order replacement labels, contact the technical service and parts department online at <a href="http://www.vestilmfg.com/parts">http://www.vestilmfg.com/parts</a> info.htm. Alternatively, you may request replacement parts and/or service by calling (260) 665-7586 and asking the operator to connect you to the Parts Department.







#### 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 Mail Fax Email
Vestil Manufacturing Corporation (260) 665-1339 info@vestil.com
2999 North Wayne Street, PO Box 507 Phone Enter "Warranty service request"
Angola, IN 46703 (260) 665-7586 in subject field.

In the written request, list the parts believed to be defective and include the address where replacements should be delivered. After Vestil receives your request for warranty service, an authorized representative will contact you to determine whether your claim is covered by the warranty. Before providing warranty service, Vestil will require you to send the entire product, or just the defective part (or parts), to its facility in Angola, IN.

#### What is covered under the warranty?

The warranty covers defects in the following original, dynamic parts: motors, hydraulic pumps, motor controllers, and cylinders. It also covers defects in original parts that wear under normal usage conditions ("wearing parts"), such as bearings, hoses, wheels, seals, brushes, and batteries.

#### How long is the warranty period?

The warranty period for original dynamic components is <u>90 days</u>. For wearing parts, the warranty period is <u>90 days</u>. Both warranty periods begin on the date Vestil ships the product to the Warrantee. If the product was purchased from an authorized distributor, the periods begin when the distributor ships the product. Vestil may, at its sole discretion, extend a warranty period for products shipped from authorized distributors by up to 30 days to account for shipping time.

#### If a defective part is covered by the warranty, what will Vestil do to correct the problem?

Vestil will provide an appropriate replacement for any *covered* part. An authorized representative of Vestil will contact you to discuss your claim.

#### What is not covered by the warranty?

The Warrantee (you) is responsible for paying labor costs and freight costs to return the product to Vestil for warranty service.

#### **Events that automatically void this Limited Warranty.**

- Misuse;
- Negligent assembly, installation, operation or repair;
- Installation/use in corrosive environments:
- Inadequate or improper maintenance;
- Damage sustained during shipping;
- Collisions or other accidents that damage the product;
- <u>Unauthorized modifications</u>: Do not modify the product IN ANY WAY without first receiving written authorization from Vestil.

#### Do any other warranties apply to the product?

Vestil Manufacturing 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.

