

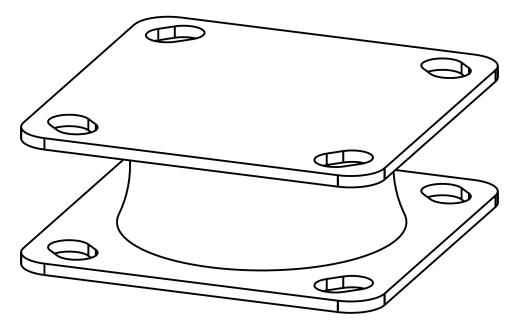
# Vestil Manufacturing Corp.

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# Bollard Shock Absorber BOL-EAP-R-3-8X8



#### **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-">https://www.vestil.com/page-</a> manuals.php.

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### 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 that might be used in this manual appear below along with their definitions.

**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.

**AWARNING** 

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

**ACAUTION** 

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



Identifies practices likely to result in product/property damage, such as operation that might damage the 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 Improper or careless use of this product could result in death or serious personal injuries.

- Read and understand the entire manual before assembling, installing, using or servicing the product.
- Read the manual to refresh your understanding of proper use and maintenance procedures.
- DO NOT attempt to resolve any problem(s) with the product unless you are both authorized to do so and <u>certain</u> that it will be safe to use afterwards.
- DO NOT modify the product in any way UNLESS you first obtain written approval from Vestil. Unauthorized modifications automatically void the *LIMITED WARRANTY* and might make the product unsafe to use.
- Inspect the product at least once per month. DO NOT use this product if the inspection reveals structural damage. Examples of structural damage include, but are not limited to, the following: 1) Cracked, torn, or otherwise damaged shock absorber; 2) Corrosion, severe wear, or other condition that compromises the integrity of the absorber; 3) Damaged or missing fasteners anchor bolts or hardware that fastens the bollard to this absorber. Replace each part that fails to pass an inspection. DO NOT use the product until it is <u>fully</u> restored to satisfactory condition. See <u>RECORD OF SATISFACTORY CONDITION</u> on p. 4.
- DO NOT use the product if it is not securely anchored to the ground/surface. Relocate the absorber and bollard if the absorber cannot be securely anchored to the ground/surface. This might be the case if, for instance, the concrete where the product is installed is broken or the anchor holes in the concrete have been enlarged.
- Replace the absorber immediately after it sustains damage. NOTE: Damaged sustained as a result of the bollard's intended/designed use is not covered by the *LIMITED WARRANTY*.
- DO NOT use this device UNLESS all labels (see *LABELING DIAGRAM*) are easily readable and <u>undamaged</u>. Replace labels as soon as damage occurs or they become difficult to read.

**NOTICE** Proper use, maintenance, and storage are essential for this product to function properly.

o Always use this product in accordance with the instructions in this manual and consistent with any training relevant to machines, devices, etc. used in conjunction with this product.

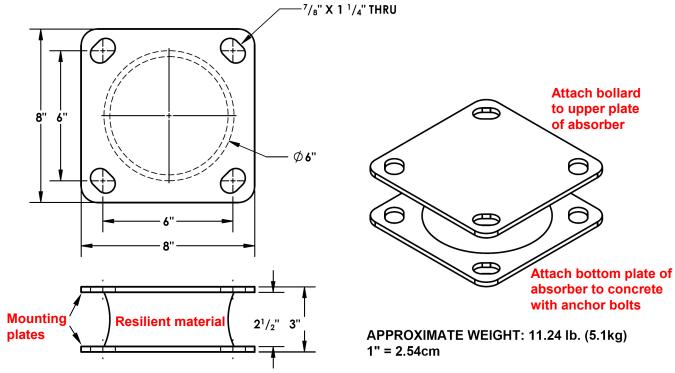
# COMPATIBILITY

This bollard energy absorber is compatible with the following bollards:

BOL-	HPRO	LPRO	TEG
24-4.5	36-24-4	36-16-4	24-24-4
24-5.5	36-36-4	36-9-4	24-36-4
36-4.5	36-42-4	48-16-4	24-42-4
36-5.5	48-24-4	48-9-4	30-24-4
42-4.5	48-36-4	60-9-4	30-36-4
42-5.5	48-42-4	72-9-4	30-42-4
48-4.5	60-42-4		
48-5.5	72-42-4		
62-4.5			
62-5.5			
72-4.5			
72-5.5			

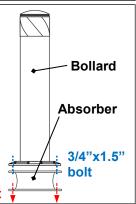
#### SPECIFICATIONS

This product is a shock absorber accessory for steel pipe bollards. Attaching it to the bottom of a bollard allows energy from collisions to be absorbed while minimizing damage caused to the bollard in the process. Anchor the absorber directly to the ground and attach the bollard to the top of the absorber. Dimensions and approximate weight of the absorber are provided in the following diagrams.



#### INSTALLATION

There are 4 elongated bolt holes in both mounting plates for 3/4" hardware. Set the absorber on the ground in its installation location. Mark the (concrete) ground surface with the positions of the bolt holes in the bottom plate. Drill holes into the concrete to receive four (4)  $^{3}$ / $_{4}$ " anchor bolts. Follow the installation directions provided with your anchoring hardware to determine the diameter and depth of the holes that should be drilled into the surface. Your building engineer should determine the necessary length of the anchor bolts. Install anchor bolts through the bolt holes in the lower mounting plate and into the anchors in the ground. Attach the bollard to the upper mounting plate with four (4)  $^{3}$ / $^{4}$  x  $^{4}$  1.5" bolts and  $^{3}$ / $^{4}$  lock nuts.



# RECORD OF SATISFACTORY CONDITION (THE "RECORD")

Before installing this product, create a record of its appearance and features. Include written descriptions of the mounting plates and the resilient material (identified in *SPECIFICATIONS* section on p. 3). Thoroughly photograph the unit and all labeling applied to it. Collate the writings and photographs into a single file. This file is a record of the unit in satisfactory condition. Compare all inspection results to this record to determine if the unit is still in satisfactory condition. Restore the absorber to satisfactory condition BEFORE continuing to use it. If the absorber cannot be repaired, remove it from service. 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

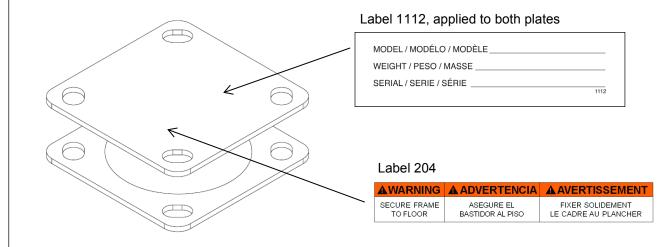
Inspections and repairs should only be performed by qualified persons. Compare the results of each inspection to the *RECORD OF SATISFACTORY CONDITION* (the "RECORD"). Do not continue to use the absorber unless all parts are in satisfactory condition. **DON'T GUESS! If you have any questions about the condition of your absorber, speak with** *TECHNICAL SERVICE personnel***. 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.** 

At least once per month and immediately following any substantial contact/collision:

- 1. Check the surface of the product for dirt or other matter. Clean the surfaces.
- 2. Examine hardware including, but not limited to, anchor bolts, bolts, nuts, and washers. Replace damaged, worn, or corroded hardware.
- 3. Examine the resilient material for cracks, tears, breakages, erosion, pitting, etc.
- 4. Inspect the mounting plates for corrosion and rusting.
- 5. Check the labels. Replace any label that is damaged or not easily readable. See *LABELING DIAGRAM* on p. 5.
- 6. Examine the whole structure for severe rusting/metal erosion, rot, thinned regions. If rusting is purely superficial, remove the rust/corrosion with a steel bristle brush or steel wool. Clean the affected area and apply touchup paint. If rusting, rot, or thinning has weakened either mounting plate, contact *TECHNICAL SERVICE* for advice.

#### LABELING DIAGRAM

Label content and location are subject to change. Your product might not be labeled exactly as shown in the diagram (below). 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\_info.htm">http://www.vestilmfg.com/parts\_info.htm</a>. Alternatively, you may request replacement parts and/or service by calling (260) 665-7586. Ask 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>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) are 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.