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BOL-R SERIES REMOVABLE BOLLARDS

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, immediately 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) Instructions in this manual; or b) Information provided on labels affixed to the product. Neither is Vestil 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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Hazard Identification: Explanation of 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, **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.

Each person who assembles, installs, uses, or maintains this product should read the entire manual in advance and fully understand the directions. 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**.

SAFETY GUIDELINES

Vestil diligently strives to identify foreseeable hazards associated with the use of its products. However, no manual can address every conceivable risk. The end-user ultimately is responsible for exercising sound judgment at all times.

⚠ DANGER Electrocutation might result if any part of the bollard or the sleeve contacts electrified wires. Reduce the likelihood of electrocution by applying **common sense**:

➤ **DO NOT** contact live electrical wires, buried cables, or underground gas lines during installation. Determine the locations of all underground utility lines **BEFORE** beginning to dig the hole for the bollard sleeve. Choose a location that is at least 3 feet away from all underground lines on all sides.

⚠ WARNING If this product is used improperly or carelessly, the operator and/or bystanders might sustain serious personal injuries or even be killed. **ALWAYS** use the product properly:

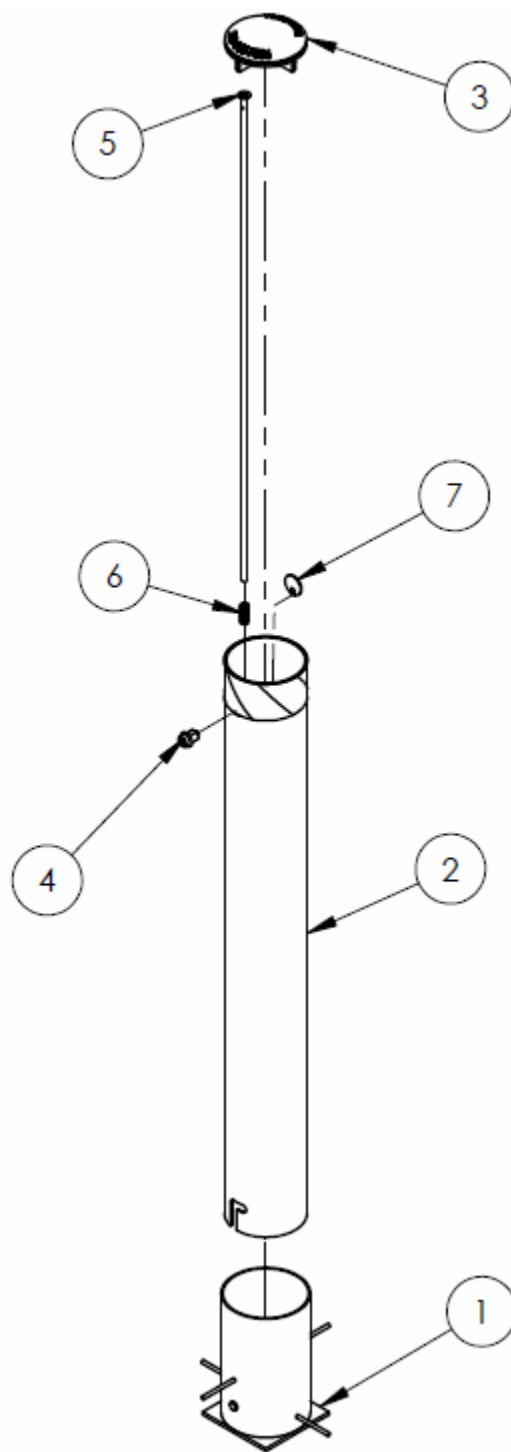
- *Failure to read and understand the entire manual before assembling, installing, using or servicing the product constitutes misuse.* Read the manual to refresh your understanding of proper use and maintenance procedures.
- Determine the net weight of the bollard from the "Product Specifications" table below. **DO NOT** attempt to install the bollard without assistance if you cannot comfortably lift and control it.
- **DO NOT** modify the bollard or sleeve. Modifications automatically void the Limited Warranty and might make the bollard unsafe to use.

PRODUCT SPECIFICATIONS

Specifications for each of the three BOL-R series bollards appear in the table below:

Model	Height above ground	Overall Height	Sleeve height	Sleeve diameter	Net Weight
BOL-R-36-5.5	36 in. (~91 cm)	46in. (~117 cm)	10 in. (~25 cm)	5½ in. (~14 cm)	88 (~40 kg)
BOL-R-42-5.5	42 in. (~107 cm)	52in. (~132 cm)	10 in. (~25 cm)	5½ in. (~14 cm)	96 (~44 kg)
BOL-R-48-5.5	48 in. (~122 cm)	58in. (~147 cm)	10 in. (~25 cm)	5½ in. (~14 cm)	103 (~47 kg)
BOL-R-KL	Key lockout option				5 (~2.3 kg)
BOL-R-SLV	Sleeve cover option				8 (~3.6 kg)

FIG. 1: BOL-R series bollards exploded parts diagram

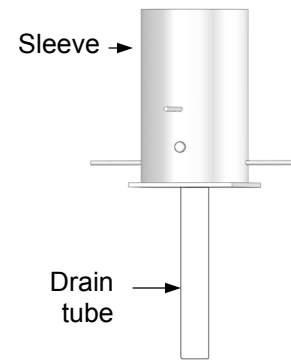


Item no.	Part no.	Description	Quantity
1	23-514-150	Sleeve weldment	1
2	23-524-196	Guard pipe weldment	1
3	23-024-157	Removable bollard cap	1
4	23-037-020	Weather resistant key lock	1
5	23-537-008	Lock rod weldment	1
6	20-146-002	Small detent springs	1
7	23-037-021	Lock cam	1
8	99-051-003	Black and yellow safety tape 3in. wide	1

INSTALLATION INSTRUCTIONS

Step 1: [Refer to FIG. 2] To prevent water from collecting in the sleeve (item no. 1; p. 3), use a 10–12in. (25-30cm) piece of 1½ in. outer diameter PVC tube to function as a drain pipe. Insert the tube into the drain hole in the bottom of the sleeve. The top of the tube should be approximately flush with the top of the bottom plate of the sleeve. Affix the drain tube to the sleeve with silicone adhesive. Allow the adhesive to dry before proceeding to step 2.

FIG. 2: Sleeve with drain tube



Step 2: Dig a 20 inch x 20 inch hole (~51cm x 51cm) approximately 24 inches deep (61cm) to contain the concrete. Center the hole on the location where you wish to install the bollard. Fill the bottom of the hole with ~12 inches of gravel and then set the sleeve in the center of the hole. Press the PVC drain into the gravel until the top of the sleeve is slightly above ground level (see FIG. 3).

Step 3: Partially fill the hole with 3,000psi compression rated concrete into the hole; stop filling when the surface of the concrete is a few inches from the top of both the sleeve and the hole. Check the vertical levelness of the sleeve and adjust the position of the sleeve is necessary; then fill the remainder of the hole with concrete. The surface of the concrete should be *near* but below the top of the sleeve. DO NOT get concrete inside the sleeve. Allow the concrete to cure according to the instructions that accompany the concrete mixture used.

Step 4: Press the rubber cap into the opening at the top of the bollard.

Step 5: Unlock the key lock by turning the key counterclockwise (see FIG. 4). Lower the bollard into the sleeve. Align the slot in the base of the bollard with the clevis pin in the sleeve (see FIGS. 5A & 5B). Press the bollard down and rotate it clockwise to seat the pin in the top (horizontal portion) of the slot.

Step 6: Turn the key clockwise in the key lock (near the top of the bollard) to lock the bollard in the sleeve (see FIG. 5).

FIG. 3: Prepare the ground and fix the sleeve in concrete

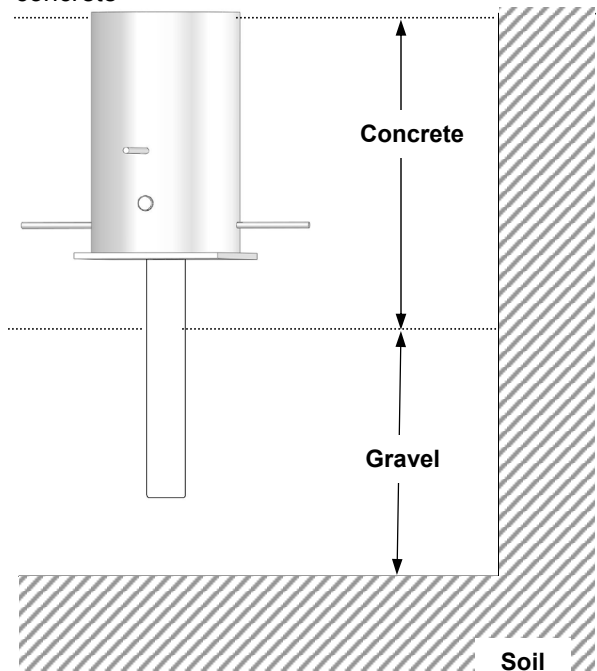


FIG. 4: Key lock

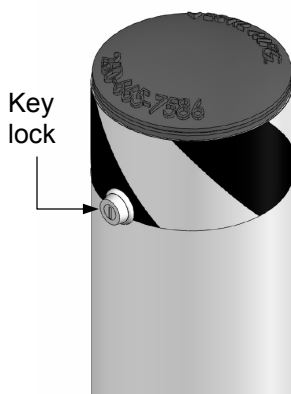


FIG. 5A: Install bollard

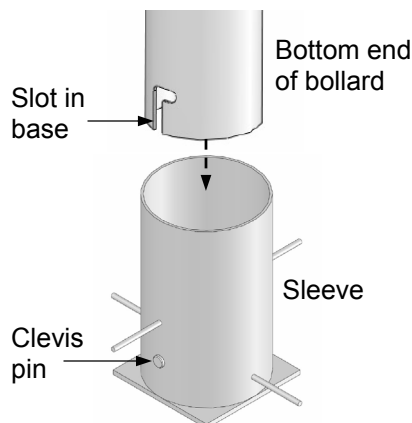


FIG. 5B: Top view of sleeve

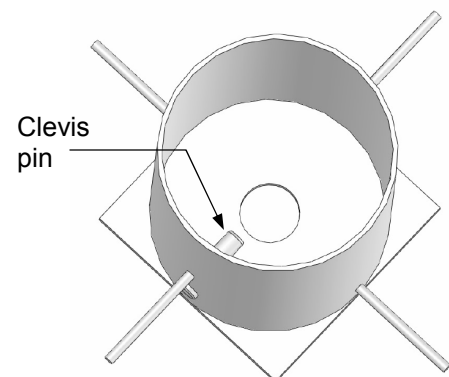


FIG. 6: Label placement diagram



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 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 Customer Invoice that displays the shipping date; AND 2) a written request for warranty service including your name and phone number. Send requests by any of the following methods:

Mail
Vestil Manufacturing Corporation
2999 North Wayne Street, PO Box 507
Angola, IN 46703

Fax
(260) 665-1339
Phone
(260) 665-7586

Email
sales@vestil.com

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"), such as bearings, hoses, wheels, seals, brushes, and batteries.

How long is the warranty period?

The warranty period for original components is 15 days. The warranty period begins on the date when Vestil ships the product to the warrantee. If the product was purchased from an authorized distributor, the period begins when the distributor ships the product. Vestil may extend the warranty period for products shipped from authorized distributors by up to 30 days to the duration necessary 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 conditions;
 - Inadequate or improper maintenance;
 - Damage sustained during shipping;
 - Accidents involving the product;
 - Unauthorized modifications: 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.

