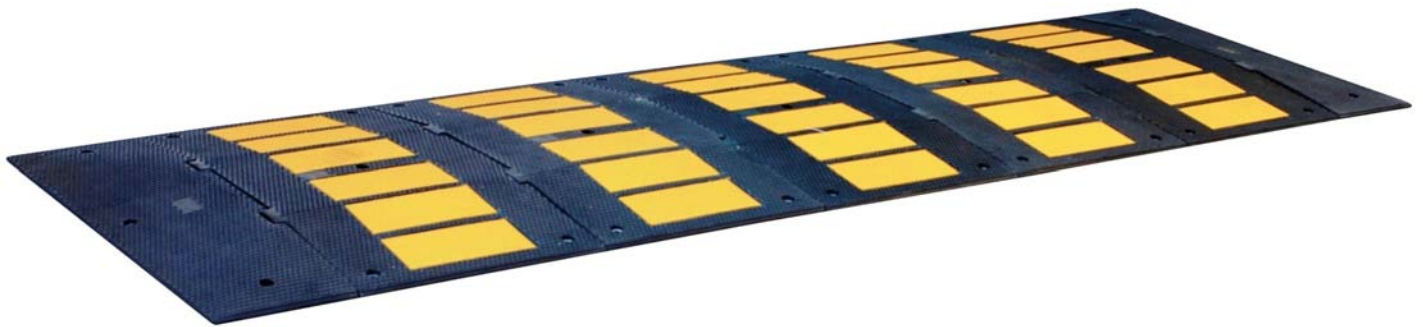




INSTALLATION MANUAL: RSH-SERIES RUBBER SPEED HUMP & ANCHOR KIT



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NOTE: Compliance with regulations, codes, and/or statutory (non-voluntary) standards enforced in the location where the traffic control device is *installed* is exclusively the responsibility of the end-user.

Table of Contents

Product Introduction.....	2
Safety Principles.....	2
Installation Instructions.....	3 - 4
Inspections & Maintenance.....	4

Table of Figures

FIG. 1 "Assemble the speed hump".....	3
FIG. 2 "Hardware kits".....	3
FIG. 3 "Attach product the asphalt surface".....	3
FIG. 4 "Attach product to concrete surface".....	4

PRODUCT INTRODUCTION



Thank you for purchasing an RSH-series rubber speed hump, referred to in this manual as “speed hump,” “traffic control device [TCD]” or “the product”. Our speed humps are durable, high-quality products rigorously engineered for dependability and simplicity. Although installation and maintenance procedures are intuitively obvious, any person who might install or maintain this product should be familiar with the instructions provided in this manual.

Dimensions and other product specifications appear in the following table:

Model	Overall dimensions (W x L x H) in inches (~cm)	Description	Includes kit of hardware to anchor hump to concrete or asphalt	Maximum over-travel speed in MPH (~kph)	Net weight in pounds (~kg)
“Mini” rubber speed humps					
RSMH-18C-GRN	18 x 24 x 2¼ (45.7 x 61 x 5.7)cm	Center section	Both kits	15 (25kph)	28 (12.7kg)
RSMH-18E-GRN	18 x 24 x 2¼ (45.7 x 61 x 5.7)cm	End section	Both kits	15 (25kph)	28 (12.7kg)
Medium rubber speed humps					
RSH-36C-GRN	36 x 24 x 2½ 91.4 x 61 x 5.7)	Center section	Both kits	20 (33kph)	53 (24.1kg)
RSH-36E-GRN	36 x 24 x 2½ 91.4 x 61 x 5.7)	End section	Both kits	20 (33kph)	53 (24.1kg)
Deluxe rubber speed humps					
RSH-108-24-C	24 x 108 x 1.2 ~(61 x 274.3 x 3)cm	Complete assembly	Concrete	5 - 10 (8 - 17kph)	106 (48.2kg)
RSH-108-24-A	24 x 108 x 1.2 ~(61 x 274.3 x 3)cm	Complete assembly	Asphalt	5 - 10 (8 - 17kph)	113 (51.4kg)
RSH-120-36-C	36 x 120 x 2 ~(91.4 x 305 x 5.1)cm	Complete assembly	Concrete	5 - 10 (8 - 17kph)	256 (116.4kg)
RSH-120-36-A	36 x 120 x 2 ~(91.4 x 305 x 5.1)cm	Complete assembly	Asphalt	5 - 10 (8 - 17kph)	264 (120kg)

Safety Principles

Vestil Manufacturing Corp. recognizes the critical importance of workplace safety. However, although Vestil diligently strives to identify foreseeable hazardous situations, this manual cannot address every conceivable danger. The end-user is ultimately responsible for exercising sound judgment at all times.

This manual will acquaint persons authorized to install and/or maintain this speed hump with proper installation and maintenance procedures. **Therefore, each person, who might use or perform maintenance on the speed hump, must read and understand every instruction BEFORE using the device or performing maintenance.** Users should have access to the manual at all times and should routinely review the directions.

This manual uses SIGNAL WORDS to classify personal injury risks and situations that might lead to property damage, as well as to draw attention to safety message(s). The reader must understand that each signal word indicates the seriousness of the identified hazard.



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 speed hump.

Employers are responsible for training employees to use the product properly. If you do not understand an instruction, ask your supervisor or employer for assistance, because failure to follow the directions in this manual might result in serious personal injury or even death.

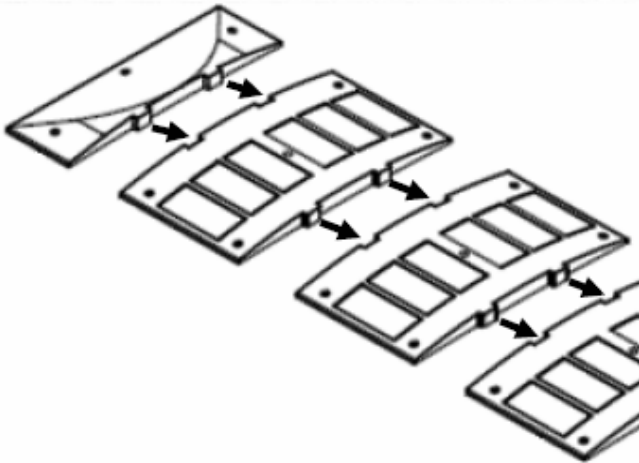
Vestil is **not liable** for any injury or property damage that occurs as a consequence of failing to apply either: 1) the instructions that appear in this manual; or if applicable 2) the information provided on labels affixed to the product. Furthermore, failure to exercise good judgment and common sense might result in property damage, serious personal injury or death. Such failure is solely the fault of the person(s) using the speed hump.

Failure to read and understand the instructions included in this manual before installing or maintaining the speed hump constitutes misuse of the product. Read the manual, as necessary, to refresh your understanding of the safe installation, inspection and maintenance procedures explained on p. 3 & 4. DO NOT attempt to resolve any problems with the product unless you are authorized to do so and are certain that it will be safe to use afterwards.

- WARNING** Improper installation might result in serious personal injuries sustained by motorists and/or pedestrians.
- Immediately replace any speed hump that becomes structurally compromised. DO NOT keep a damaged speed hump in service. Follow the inspection recommendations presented on p. 4 to determine whether a speed hump or a portion of the product should be replaced.
 - Post signs visible to and readable by motorists to warn them about the location of the speed hump and to suggest an appropriate maximum speed when travelling over the hump (see "Maximum over-travel speed" in Table on p. 2).
 - DO NOT modify the speed hump or the mounting hardware in any way. Unauthorized modifications might make the product unsafe to use and could result in injuries suffered by drivers and/or bystanders.

Installation

FIG. 1: Assemble the speed hump



Step 1: Prepare the surface (road) where the speed hump will be installed. Thoroughly sweep the surface/road and allow the surface to dry completely, if applicable.

Step 2: Assemble the speed hump in the location where it will be installed. Fit the tabs of one piece into the corresponding slots on the next piece, as shown in FIG. 3. [NOTE: 1 end piece has tabs; the other end piece has slots.]

Step 3: Attach the speed hump to the surface.

Asphalt: to attach the product to an asphalt surface:

- 1) As shown in Fig. 3, affix strips of butyl tape to the entire perimeter of the underside of the speed hump (only 1 side of perimeter shown in Fig. 3, but tape should be applied to all 4 sides);
- 2) Flip over the speed hump and then press it firmly against the pavement;
- 3) Drive the spikes through the holes in each section (the head of each spike should not protrude above the surface of the speed hump).

FIG. 2: Hardware Kits

Concrete anchor kit includes lag bolts, washers, and anchor sleeves (End pieces and Center pieces require different numbers of concrete anchors or asphalt spikes)

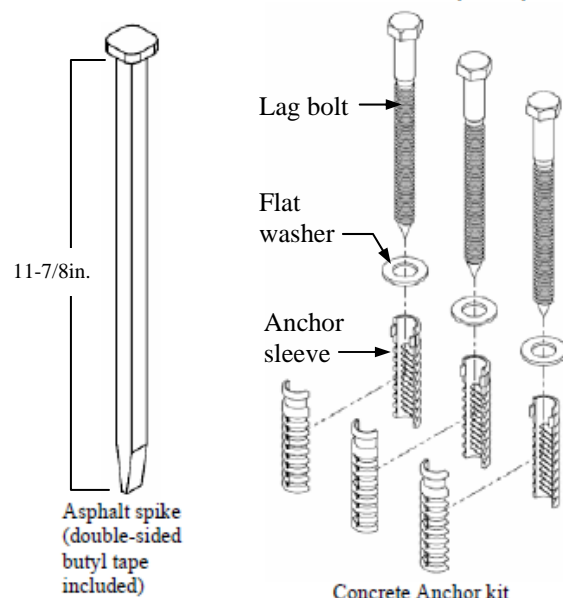
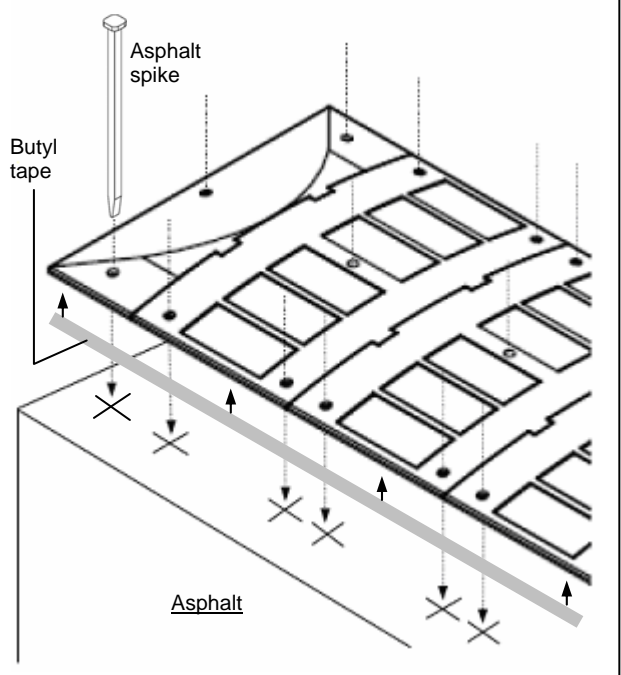
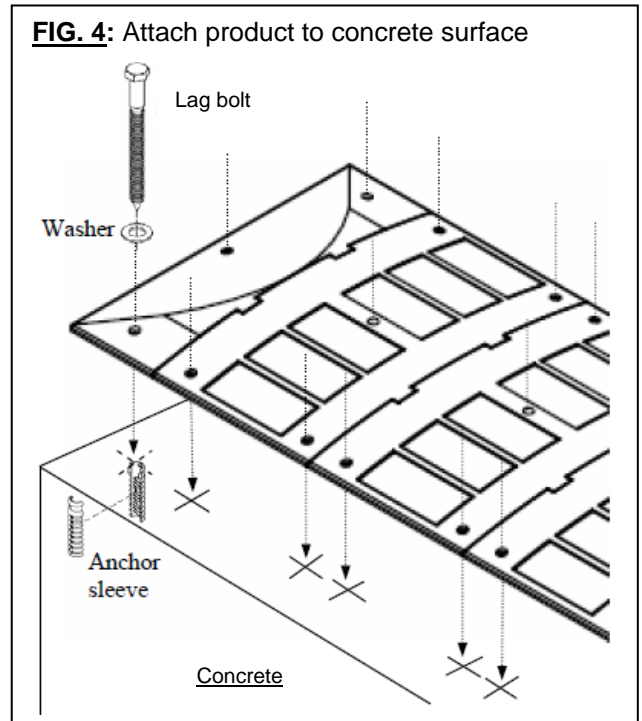


FIG. 3: Attach product to asphalt surface



Concrete:

- 1) Mark the concrete with the location of each bolt hole;
- 2) Drill 13/16in. (~2.1cm) holes in the concrete approximately 6in. deep (locations shown as X's in the diagram above);
- 3) Press/tap the anchor sleeves into the drilled holes until they are at least flush with the road surface or slightly lower.
- 4) Align the holes in the speed hump with the holes drilled into the concrete surface. Slide a washer onto each lag bolt; then insert a bolt into each bolt hole and tightly fasten the bolts to the anchors.

**Inspections & Maintenance**

At least once per month:

- Closely inspect each section of the speed hump for damage (cracks, splits, etc.). If any section is cracked or split, replace it.
- Try to wiggle the sections of the speed hump to evaluate the soundness of the connections between anchor bolts and anchors, as well as between the anchors and the road/surface. If the speed hump can wobble, i.e. separates from the road/surface, determine whether each connection is loose. Tighten loose connection(s) and apply more butyl tape to the bottom of the loose section. It might be necessary to either fill a hole(s) in the concrete with epoxy or move the speed hump to another location, if the bolt and anchor can slide free of the concrete.
- The speed hump incorporates yellow highway tape to provide a sharp contrast with the surface/road. Wipe dirt and other filth from the surface of the speed hump, and particularly from the highway tape to maintain contrast.