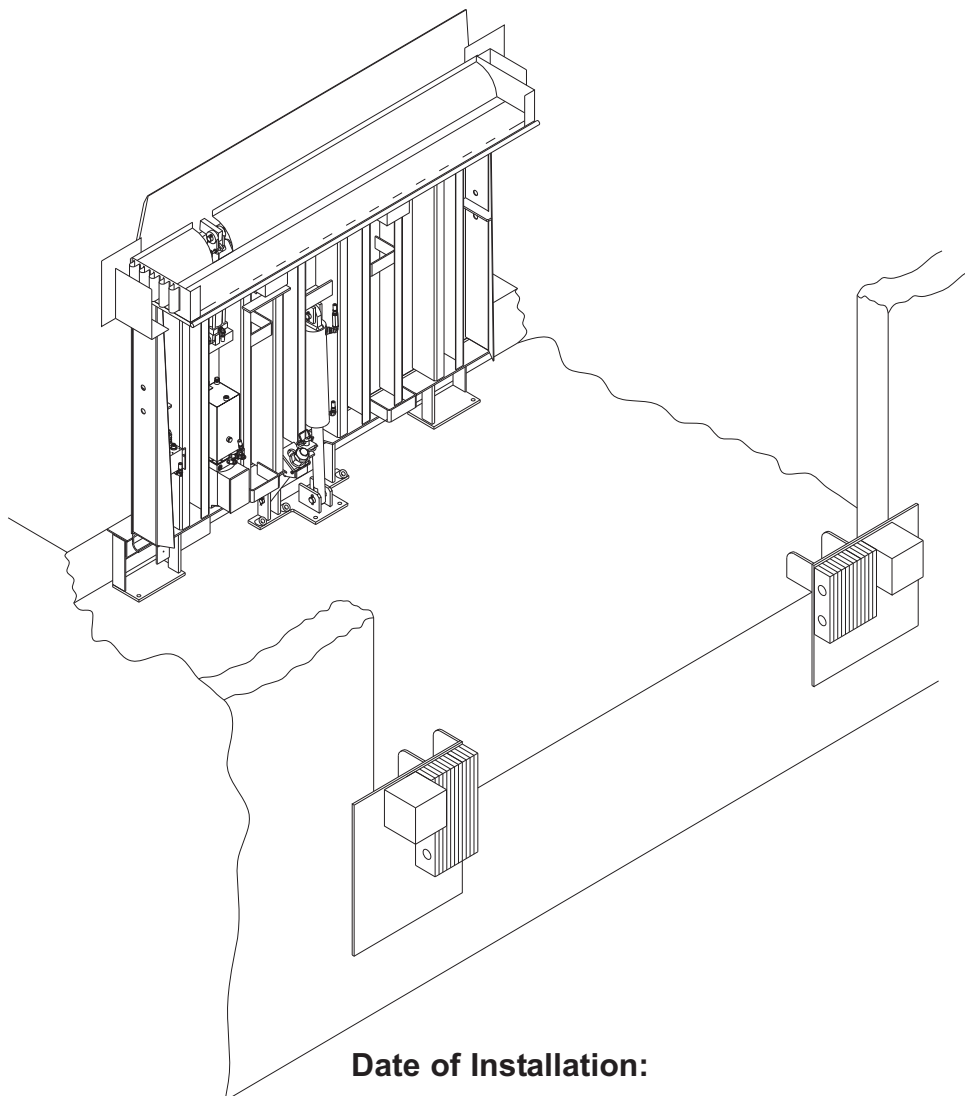


RITE-HITE® VHLS

Vertical Under-Leveler Seal Installation Instructions & Owner's Manual



This Manual Covers All Units Shipped 4/2014 to Date



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File Information

Document Name:	VHLS0003
Date Last Revised:	4/11/2014
Revision:	3

General Precautions

 WARNING	
	<p>Post safety warning and barricade work area, at dock level and ground level to prevent unauthorized use of the dock position while service work is being performed.</p>

Introduction

Thank you for purchasing a Rite-Hite VHLS Vertical Under-Leveler Seal. For other applications, please contact your local Rite-Hite Representative.

Preparation

Remove all of the contents from the containers and check for damage. If any product shows signs of damage, contact Rite-Hite Environmental Enclosures Corporation or your local sales representative.

Illustrations

Illustrations for this document are contained on drawing VHLS0004.

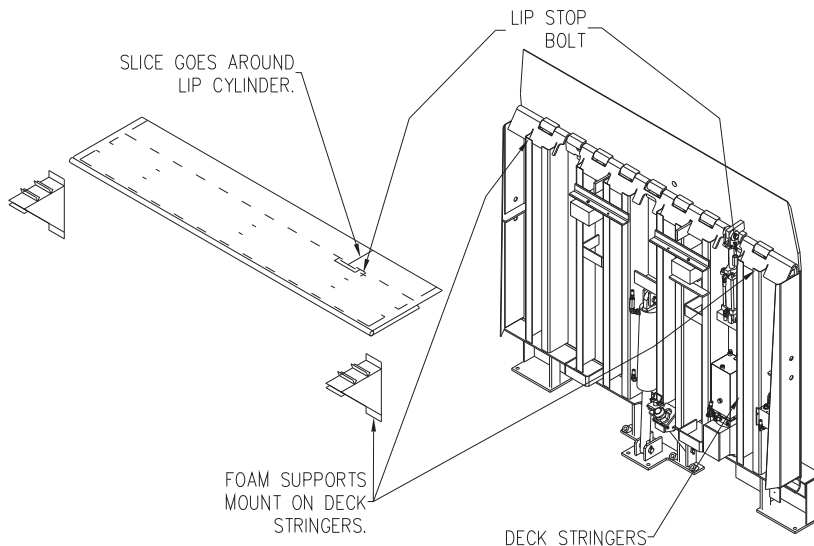
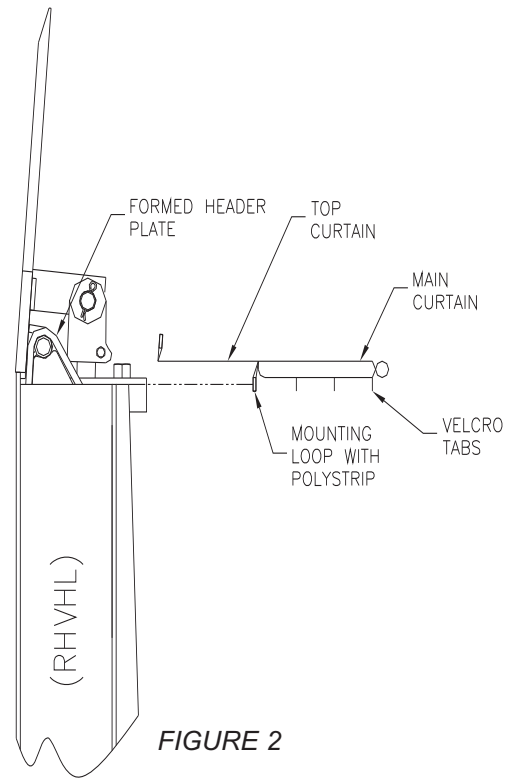
Care & Maintenance

Occasional cleaning of the seal is recommended. Use a low pressure hose or damp cloth to wash the unit.

VHLS INSTALLATION INSTRUCTIONS

These instructions illustrate how to install a VHLS seal under a RHV4000 series Rite-Hite® leveler.

- 1) Review the site information and survey. Verify that all the parts are present and made to the correct specifications.
- 2) Make sure the leveler is in the stored position and that the safety strut(s) are in place. Follow the same safety instructions as listed in the leveler manuals for performing maintenance and installing this seal.
- 3) Make sure the leveler is in good working order and perform any maintenance on the leveler, if required, before installing the VHL seal.
- 4) The main curtain comes precut to fit the RHV series leveler. The mounting loops have cutouts that fit between the end load legs, lip stop bolt, etc. Make sure the mounting loops have poly strips inside and orient the curtain as shown in Figures 1 & 2
- 5) Push the lip stop bolt through the cutout on the main curtain. The top curtain section attached to the main curtain is sliced to fit around the lip extending cylinder. (See Figure 1.)



VHLS INSTALLATION INSTRUCTIONS CONT.

- 6) Rotate the curtain up and against the back of the lip. (See Figure 3.) Make sure the mounting loops fit around the end load legs. This will center the curtain for fastening. Make sure the poly strips in the pockets are located to land on top of a deck stringer. The poly strip between the end load legs will get fastened to the deck stringers next to the legs. The poly strip to the inside of the lip extending cylinder gets pushed next to the end load leg then fastened to the deck stringer. The poly strip to the outside of the lip extending cylinder gets pushed next to the lip stop bolt. Always fasten to the deck stringer at the lip stop bolt, and if available, to the outside stringer. The poly strip on the opposite side of the lip extending cylinder gets pushed next to the end load leg and attached at the end load leg stringer and the outside stringer.

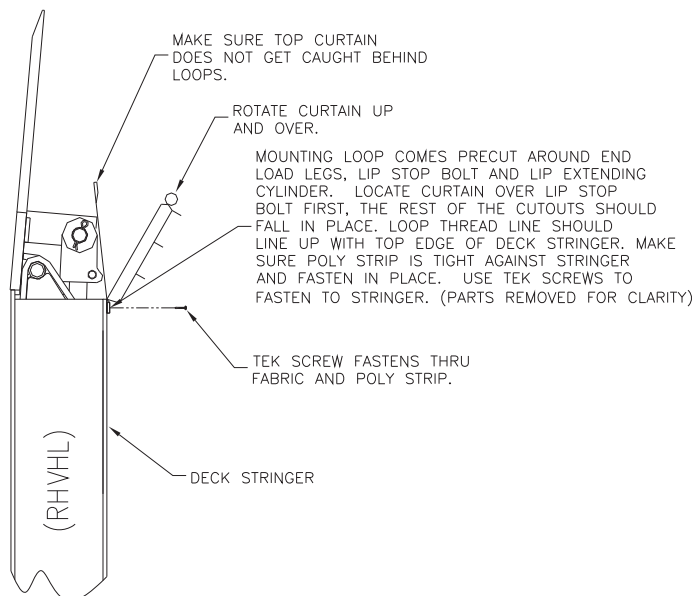


FIGURE 3

- 7) Using the self-drilling screws, attach the poly strips to the deck stringers. (Note: Make sure top curtain is not behind the loops with poly strips.)
- 8) Install magnets in the top curtain top loop to hold it in place during operation. Insert magnets by making a slice in the backside of the loop, through only (1) layer of fabric. Slice at each magnet location. 1 to 2 magnets will be used to hold the top curtain in place in the loop on the lip extending cylinder side of the leveler. Slide the magnets into the pocket facing towards the lip. Locate the magnets either on the backside of the lip or on the lip cylinder support brackets. Make sure one magnet gets located at the outside, the other a couple of inches away from the cylinder. Tuck curtain under cylinder ram. (See Figure 4.) Install the remaining magnets in the loop on the other side of the extending cylinder. Again, one at the outside, one next to the cylinder, and the others spaced evenly between. Tuck curtain under other side of cylinder ram.

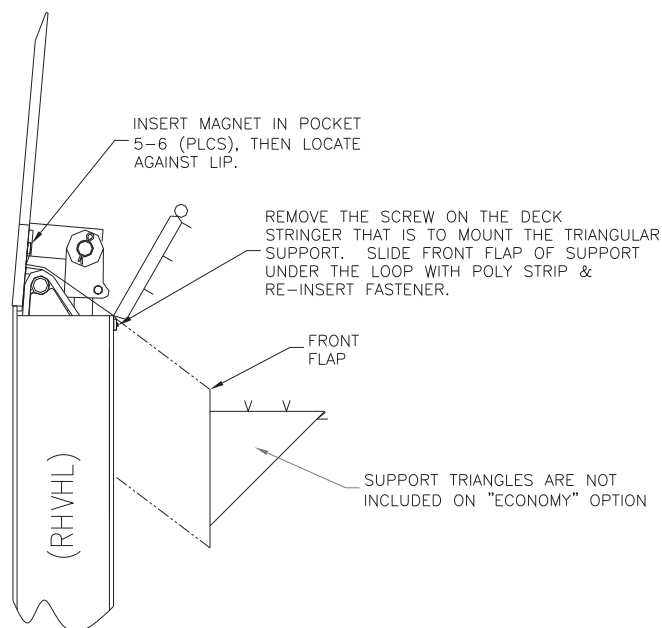


FIGURE 4

If installing the Standard Premium VHLS, continue with step 9. If installing the Economy VHLS, skip steps 9 through 15 and continue with Step 16. The Standard Premium VHLS includes foam support triangles, the Economy VHLS does not.

- 9) Once the top curtain is mounted, rotate curtain up and over, facing the back side of the leveler lip. (See Figure 4.)

VHLS INSTALLATION INSTRUCTION CONTI.

- 10) Next, mount the foam support triangles. (See Figure 5.) These will get mounted on the outer most deck stringers on the leveler. On 6'-0" and 6'-6" wide units, one of the outer most stringers has the lip stop bolt mounted to it. On 7' wide units, both outside stringers are open. (Note: Do not mount the support triangles to the center if possible. The outside edges of the curtain are more critical in keeping a tight seal. The rods located in the curtain will provide adequate support at center to keep a good seal against the pit floor.)

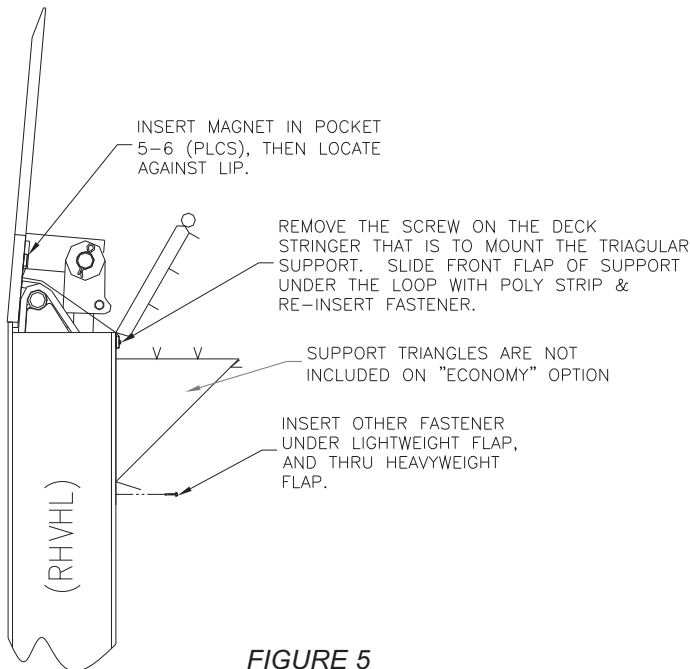


FIGURE 5

- 11) Remove the screw that holds the mounting loop to the deck stringer at the two stringers that the supports are to be mounted.
- 12) Lift up the loop and slide the front flap of the support underneath the mounting loop. The face of the pad with the Velcro tabs should be approximately 1-1/4" to 1-1/2" away from the front edge of the deck stringer. Do not get pad too far forward. Being slightly further back is OK, as long as the Velcro attachment tabs connect between the support triangles and main curtain. Reinstall the screws attaching the poly strip and the tab on support triangles. (See Figure 5.) (Note: On the stringers with the lip stop bolt, notch the mounting tab so the support can be centered on the stringer. Take care in not taking too much fabric away.)

- 13) Install another screw on the back flap of the support triangle. Lift the lightweight fabric up and attach screw through the heavyweight fabric. The lightweight flap is used to hide the screw. Try to keep the screws and support centered on the deck stringers.
- 14) Do this for the other side.
- 15) Make sure rods are centered in their pockets, then rotate the main curtain back around on top of the supports. Attach the Velcro tabs on curtain to the Velcro flaps on supports. (See Figure 6.) In some applications, the supports may only have two Velcro flaps even though the curtain will have 3 Velcro tabs. In these cases, the lower portion of the curtain should be allowed to hang over the front/bottom edge of the supports. (Note: The main curtain should be either perpendicular when coming off the leveler or slightly angled backward toward the pit floor. This is to make sure curtain does not skip past the leading edge of the pit floor. Adjust if necessary.)
- 16) Verify the function of the seal by cycling the leveler up and down, making sure it seals evenly on both sides and stays on top of the pit floor. Adjust if necessary.
- 17) The outside edges of the main curtain that seal against either the pit wall or bumper bracket can be trimmed for a better seal if needed. Take care to not take too much material away.

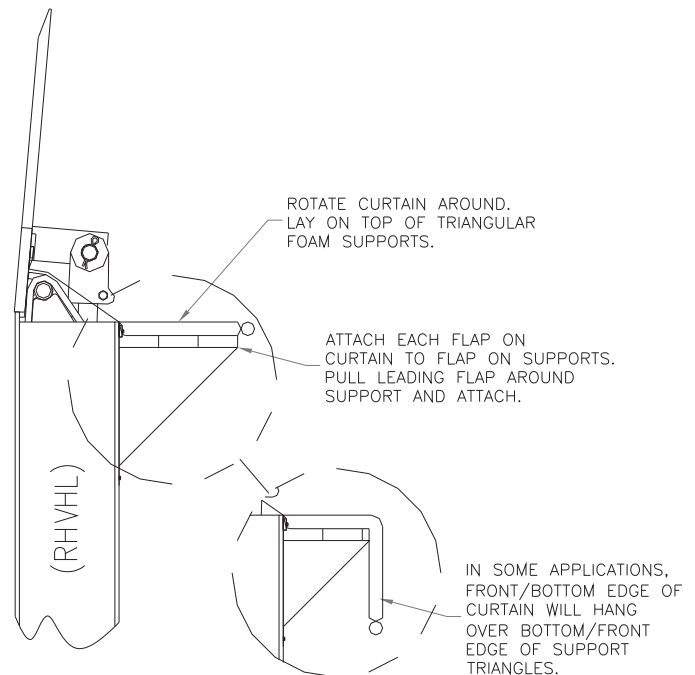


FIGURE 6

VHLS END SEAL INSTALLATION INSTRUCTIONS

These instructions illustrate how to install an “End Seal” on Rite-Hite® HDVHL and RHV4000 series levelers.

- 1) Review the site information and survey. Verify that all the parts are present and made to the correct specifications.
- 2) Make sure the leveler is in the stored position and that the safety strut(s) are in place. Follow the same safety instructions as listed in the leveler manuals for performing maintenance and installing this seal. Make sure the leveler is in good working order before installing the seal.

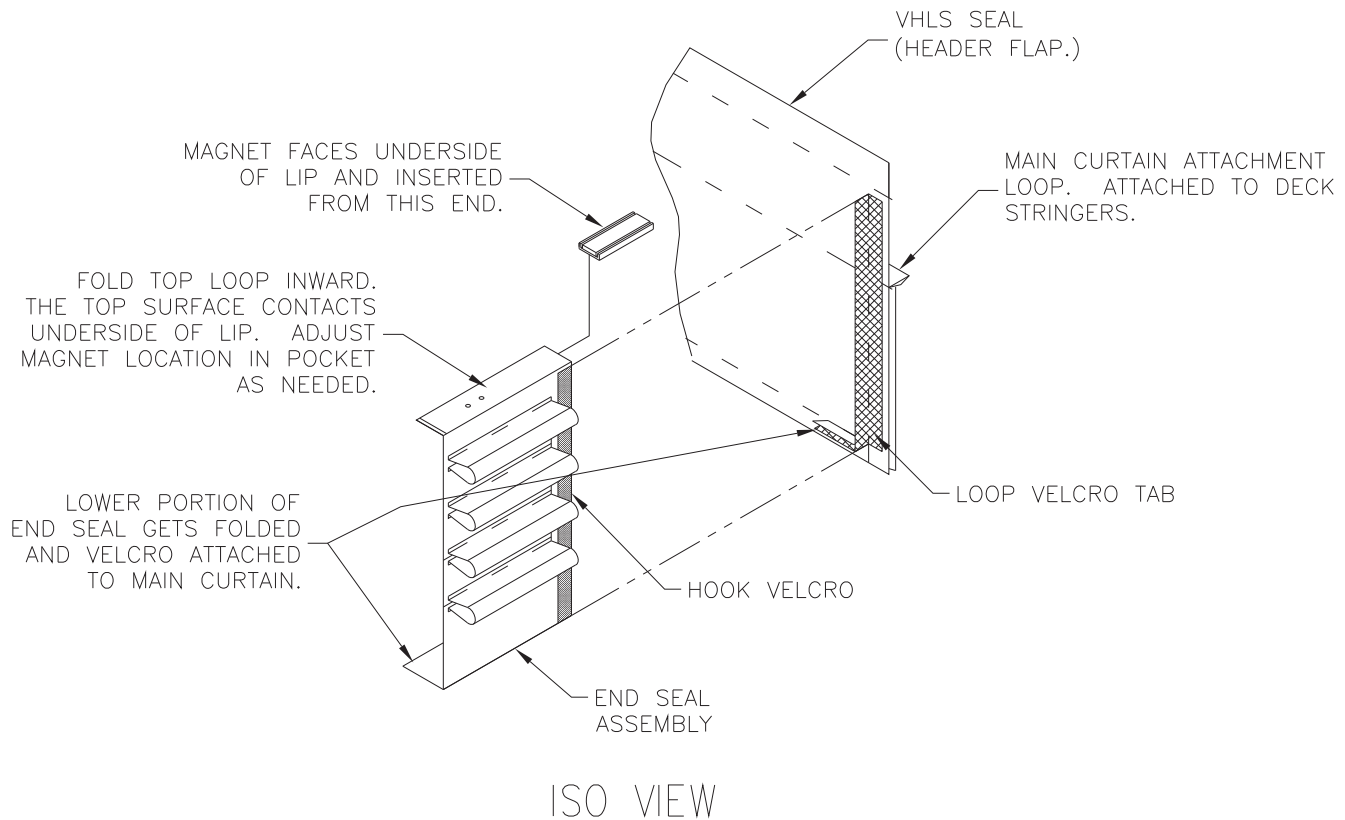
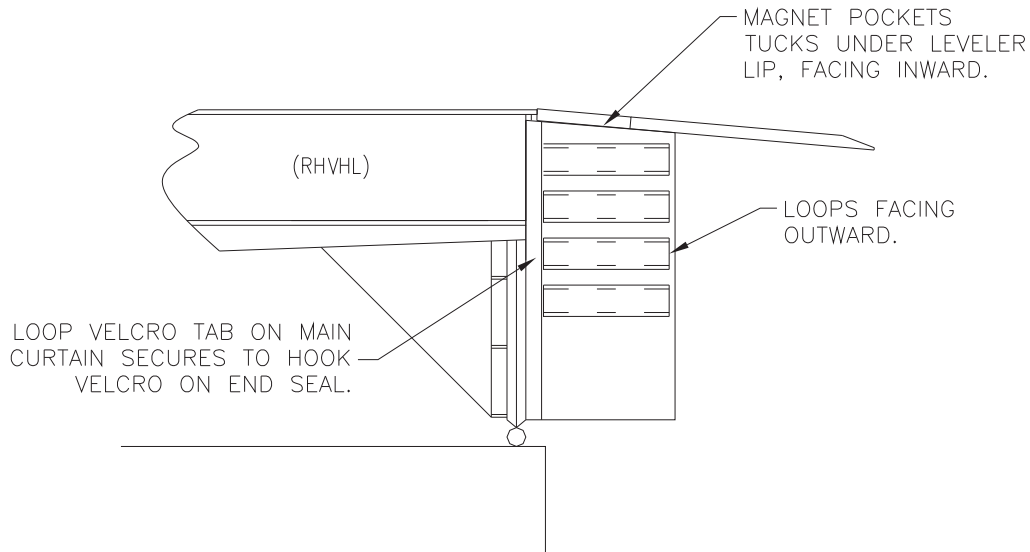


FIGURE 7

VHLS END SEAL INSTALLATION INSTRUCTIONS CONT.

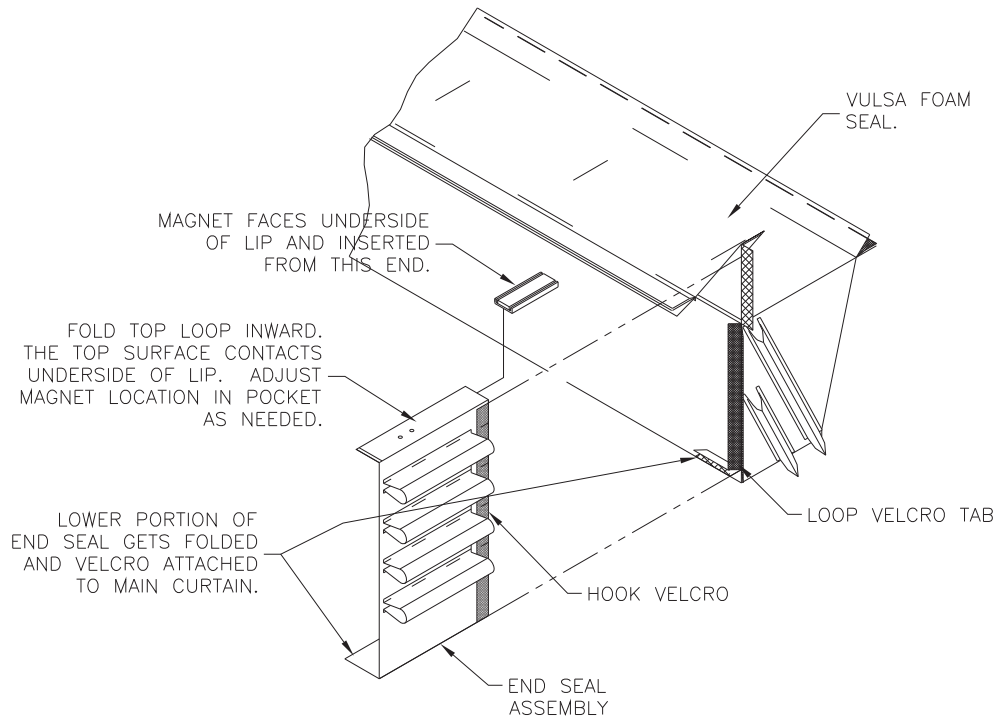
VHLS/VULS – End Seal without Lip Corner Seal

- 3) Orientate a right side End Seal as shown in Figure 7–VHLS, Figure 9–VULSA. (Right side shown, left side is opposite, as viewed from front of leveler.)



SIDE VIEW

FIGURE 8



ISO VIEW

FIGURE 9

VHLS END SEAL INSTALLATION INSTRUCTIONS

- 4) Starting at the top, align the hook Velcro on the End Seal to the loop Velcro tab on main seal.
- 5) Work your way down, making sure the loop Velcro tabs on main curtain are securely attached to both sides of hook Velcro on End Seal.
- 6) At the bottom, fold lower portion of End Seal so the Velcro matches the Velcro on main curtain.
- 7) Insert the magnet into the top loop on End Seal. Make sure magnet is orientated correctly so when the top loop is folded, the magnet faces the underside of the lip. (Note: A mounting bracket is shipped with the unit for applications where the magnet can not be used. Locate and weld the bracket based on the holes on the top loop. Reference Figure 11, then go to Step 8.)
- 8) Fold loop with magnet and attach to the underside of the leveler lip. Adjust location to provide best seal. (See Figures 8 & 10 also.)
- 9) Make sure End Seal is perpendicular with the VHL Seal. Adjust if necessary.
- 10) Do this for the other side.

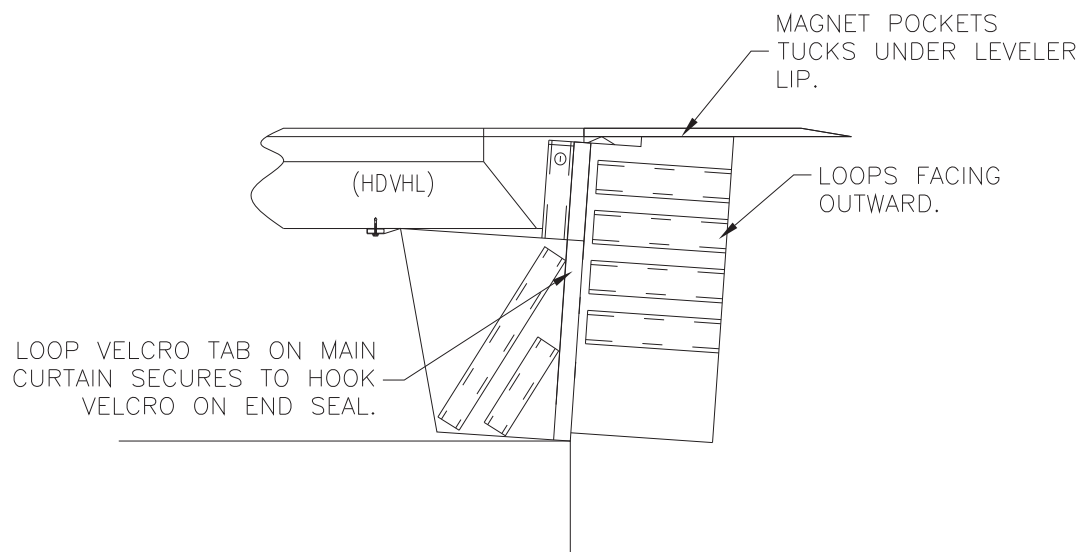


FIGURE 10

VHLS END SEAL & LIP CORNER SEAL INSTALLATION.

VHLS/VULSA – End Seal with Lip Corner Seal

Figure 11 shows VHLS. Use same procedure on VULSA. Follow Steps 3-6 above, then with these steps below. Always install Lip Corner Seal before End Seal if used together.

- 11) Remove nuts holding Lip Corner Seal to bracket. (Note: magnet not used.)
- 12) Push lower support fabric on Lip Corner Seal over the studs, so the studs protrude out of the bottom of the fabric.
- 13) Next, locate the holes in the End Seal top loop over studs on Lip Corner Seal bracket. (See Figure 11.)
- 14) Re-install nuts on studs. Tighten securely.
- 15) Make sure End Seal is perpendicular with the VHL Seal. Adjust Velcro attachment if necessary.
- 16) Do this for the other side.

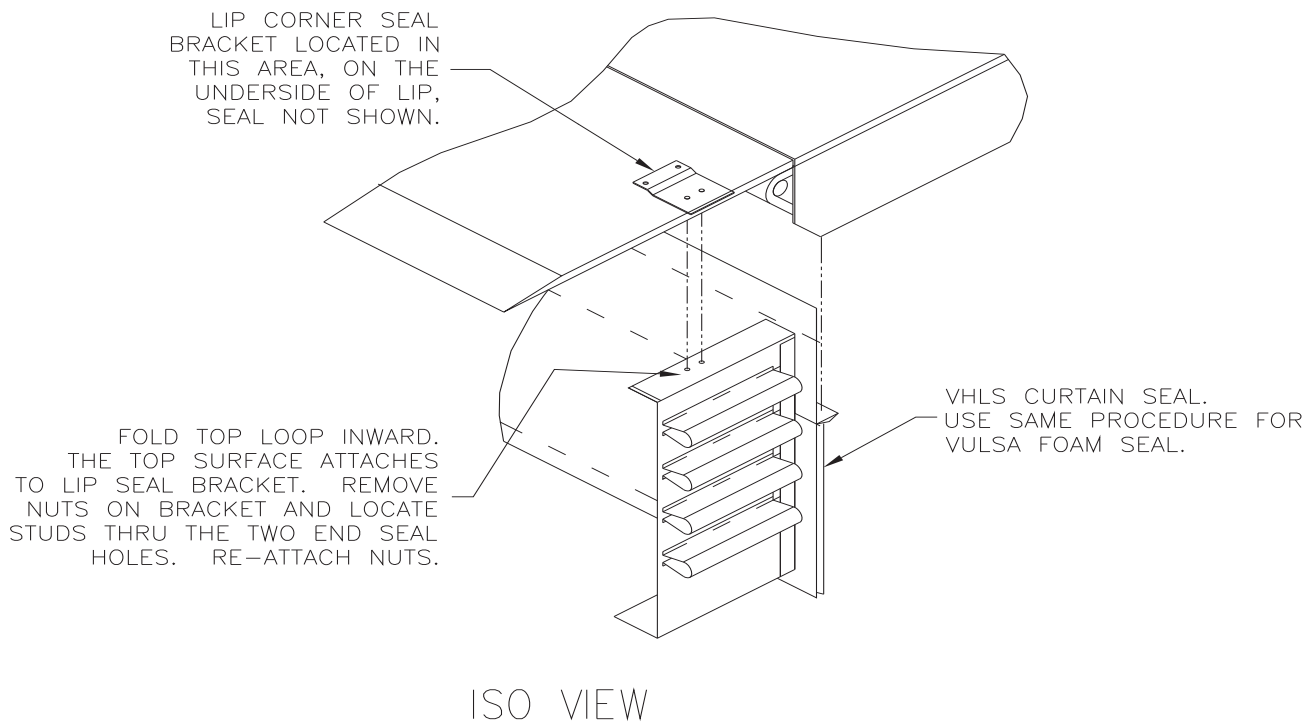


FIGURE 11

VERTICAL LIP CORNER INSTALLATION INSTRUCTIONS

These instructions illustrate how to install a Vertical Lip Corner Seal on a Rite-Hite® RHV4000 or HDVHL series leveler. Review all instructions before proceeding to determine which instructions best fit your application and/or model leveler. Most of these instructions are applicable for all situations/models with minor adjustments as listed.

- 1) Review the site information and survey. Verify that all the parts are present and made to the correct specifications.
- 2) Make sure the leveler is in the stored position and that the safety strut(s) are in place. Follow the same safety instructions as listed in the leveler manuals for performing maintenance and installing this seal.
- 3) Make sure the leveler is in good working order and perform any maintenance on the leveler, if required, before installing the under leveler seal.

(Illustrations shown are for an HDVHL series vertical leveler. Make adjustments as needed for all other models.)

- 4) Mark the hole locations on the corner seal mounting bracket onto the underside of the leveler lip. Do this by holding up the corner seal and bracket as shown in Figure 12.

Make sure the seal fits around the lip spool with some interference and/or overlap. The fingers will be trimmed later to fit exactly around the lip spool. The 4"-5" dimension makes sure the seal is far enough behind the deck header plate. The back flap may need to be trimmed to seal tight against the leveler, especially on tapered toe guards. (Note: If an End Seal is to be used in conjunction with the Vertical Lip /Corner Seal, the location of the bracket has to be specific for the holes on the End Seal to match the bracket studs. See Figure 13 for special notes.)

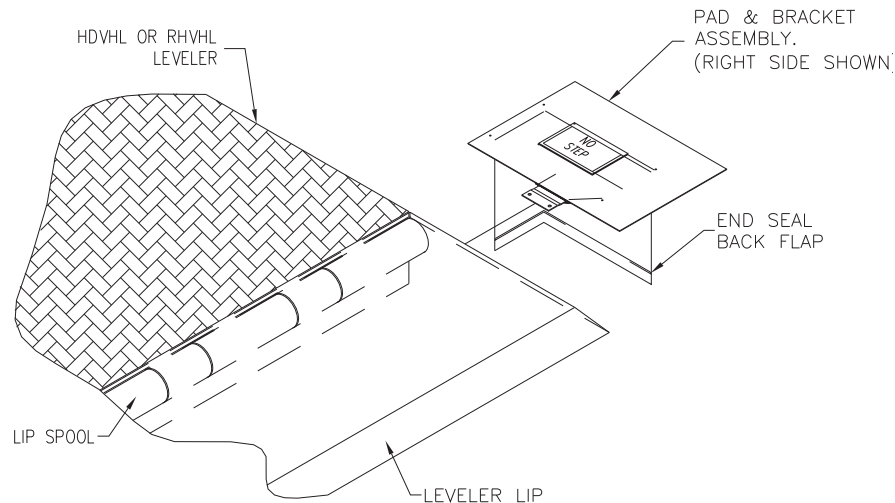


FIGURE 12

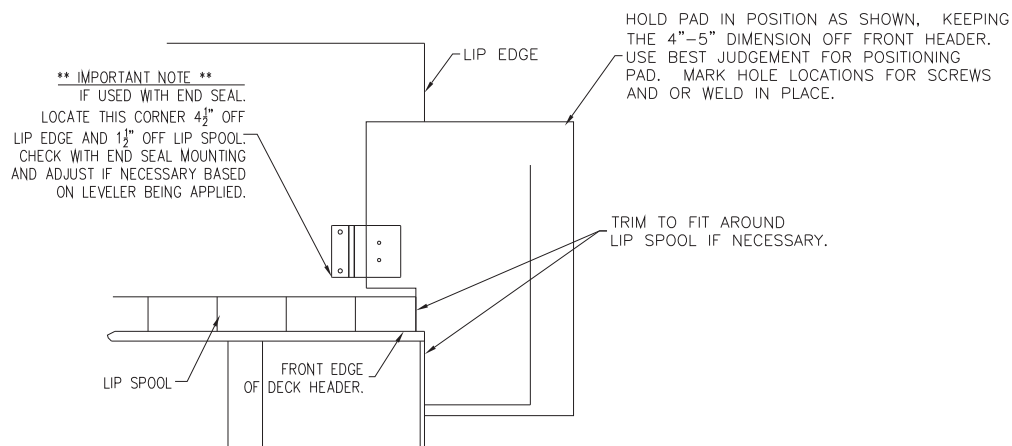


FIGURE 13

VERTICAL LIP CORNER INSTALLATION INSTRUCTION

- 5) The bracket can be mounted in two ways:
 - a) Welding (See Figure 14) – clean the edge of the bracket and the area underside of the lip that is to be welded. Locate the bracket into position based on the marks and clamp in place. Tack weld the plate to the lip. Make sure fabric on seal does not get burned by the welding.
 - b) Screw mounting (See Figure 14) – Drill blind holes at the marks made on the leveler lip. Use a 7/32" (0.221") drill size. The self threading screws supplied require a specific hole size and any deviation may cause screw fracture or incorrect mounting strength. The use of cutting lubricant is recommended. Locate the bracket into position and screw in place. Take care in using self threading screws. Incorrect installation or over torque may cause the screw to fracture. Best procedure is to partially set the screw, back it out to let the filing come out, and repeat this method until the screw is completely seated.
- 6) Repeat these steps for the other side.
- 7) Do a final check/trim operation by cycling the leveler and trimming the top flap to seal tight around the seal or shelter. (Note: Trimming is acceptable but not always necessary. Trailer movement side to side may not exhibit the same seal and trimming may not end up sealing the same way. Take care in determining what and how much to trim the seal.) See Figure 15.

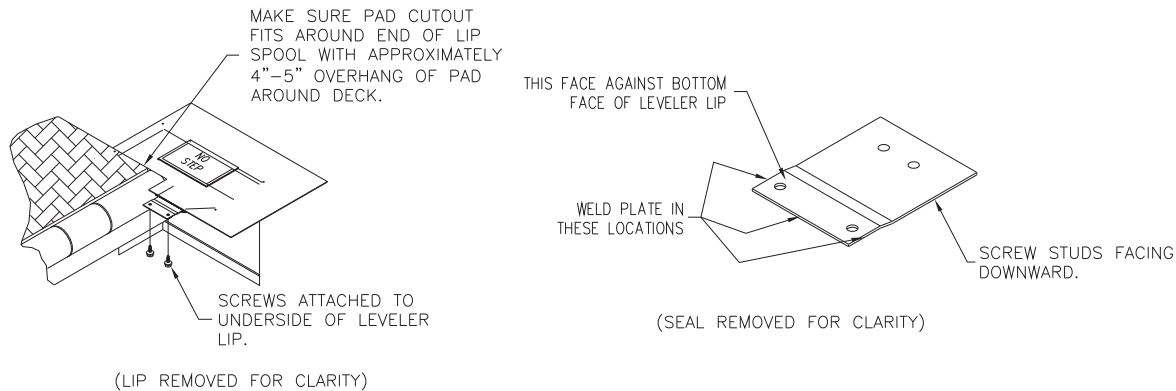


FIGURE 14

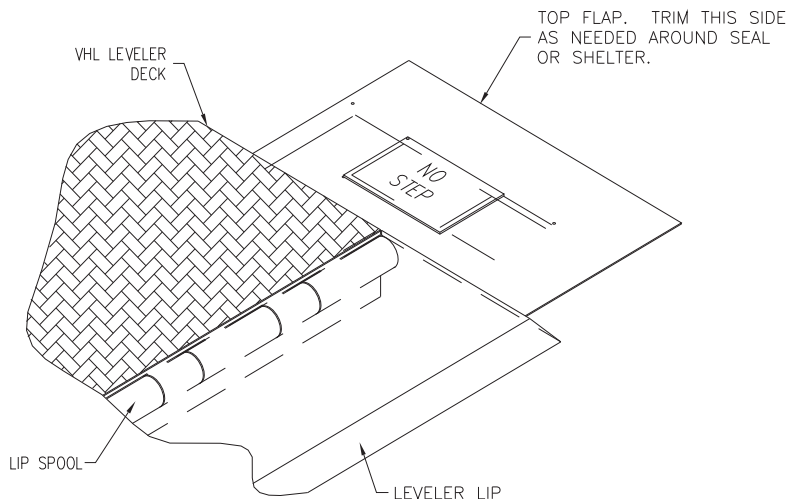
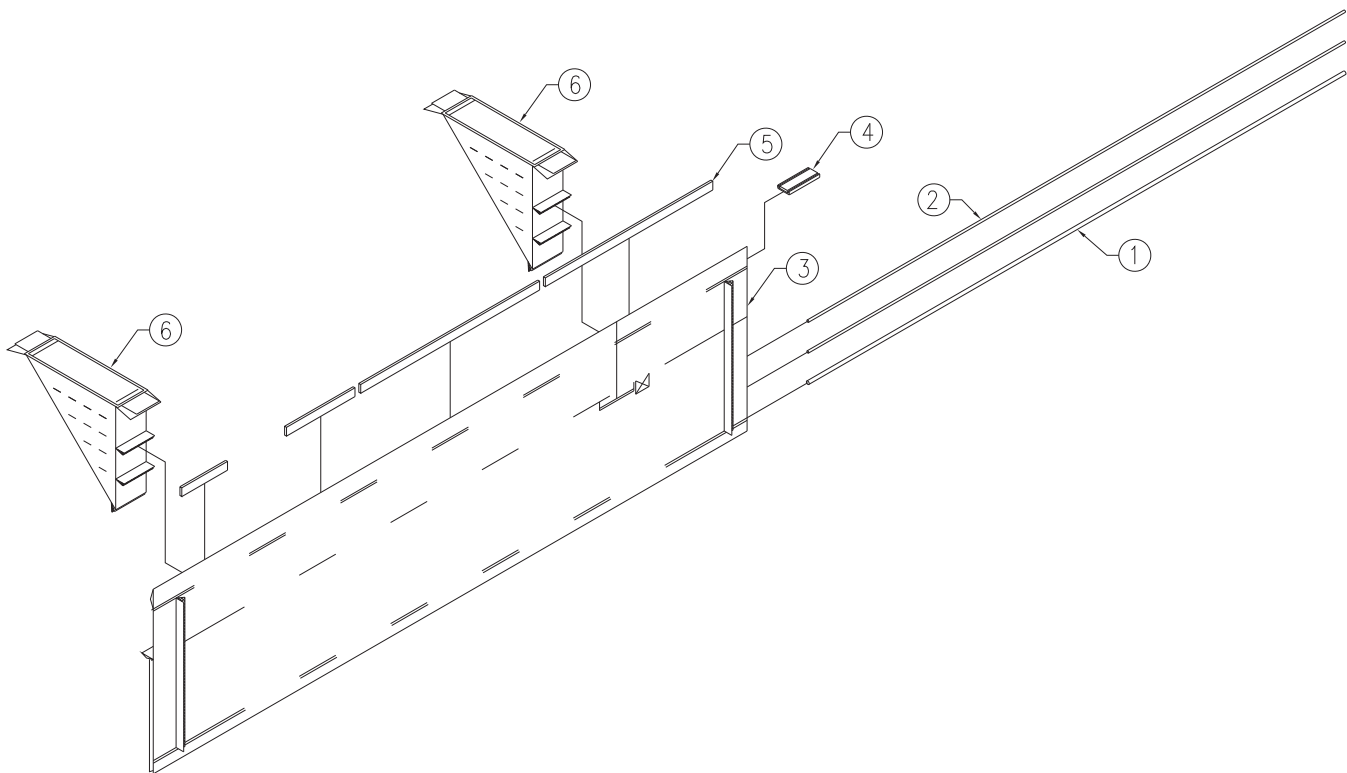


FIGURE 15

EXPLODED VIEW - STANDARD

This exploded view represents a standard configuration of the VHLS, Vertical Under-leveler Seal. The shipped unit may have configurations not shown in this exploded view, depending on the options chosen and application of the unit.

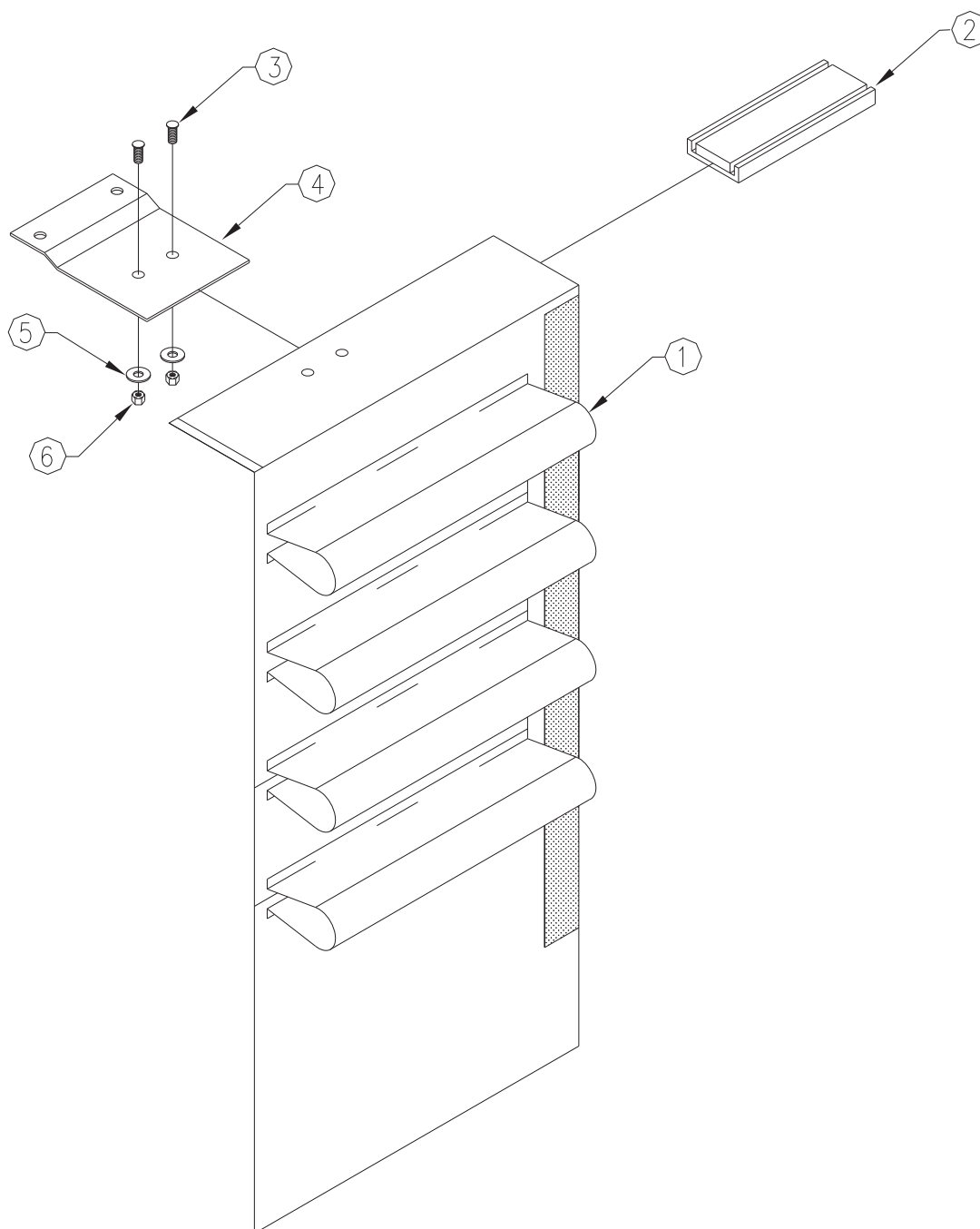
- | | |
|----------------------|--|
| 1. 3/8" Steel Rod | 4. Magnet, 65 lb. |
| 2. 1/4" Steel Rod | 5. 1/4" x 1" Poly Strip |
| 3. VHLS Curtain Seal | 6. Triangular Foam Supports (Not included with Economy option) |



EXPLODED VIEW - END SEAL

This exploded view represents the standard configuration of the VHLS End Seal.

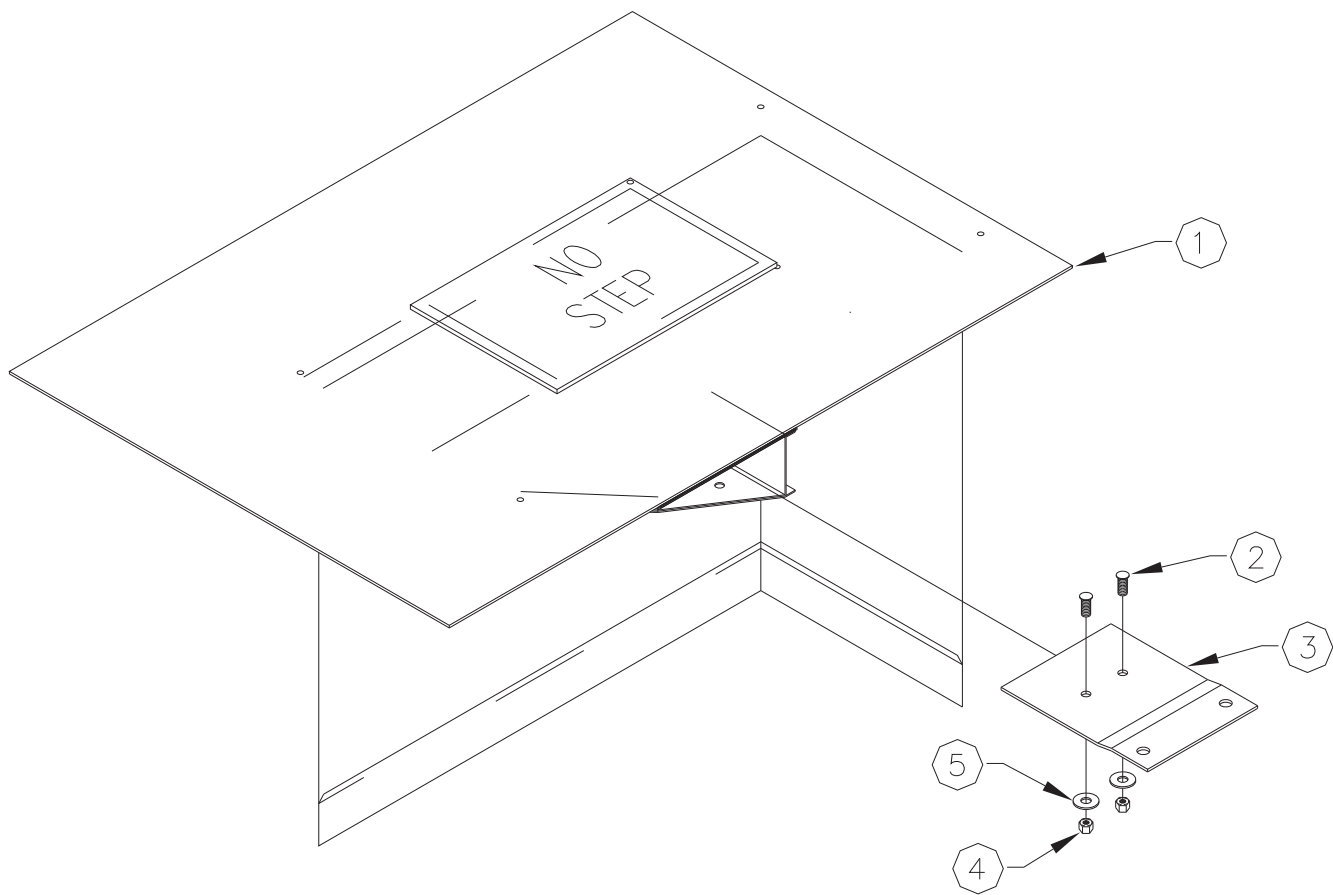
- | | |
|----------------------|---|
| 1. End Seal Assembly | 4. Corner Bracket |
| 2. Magnet, 65 lb. | 5. Flat Washer 13/64 x 1/2 x 0.036, ZNC |
| 3. Clinch Stud | 6. Hex Nylon Lock Nut, #10-24
(Hardware Bag not shown) |



EXPLODED VIEW - LIP CORNER SEAL

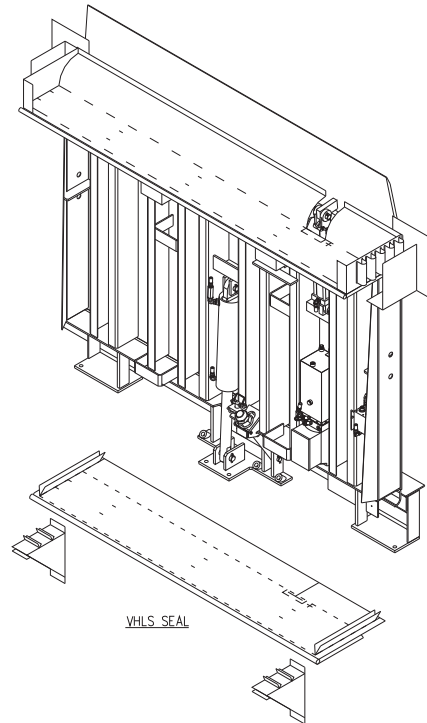
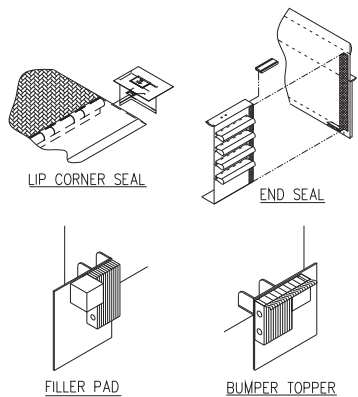
This exploded view represents the standard configuration of the VHLS Lip Corner Seal.

- | | |
|-------------------------------|--|
| 1. VHLS Lip Corner Seal Cover | 4. Hex Nylon Lock Nut, #10-24 |
| 2. Clinch Stud | 5. Flat Washer, 13x64 x 1/2 x 0.036, ZNC |
| 3. Corner Bracket | (Hardware Bag not shown.) |



Rite-Hite® Vertical Leveler Seals Quality Checklist

- ☐ Under-Leveler Seal (VHLS) *[VHLS0003]
- ☐ RHV Series Leveler
- ☐ Other
- ☐ End Seals (74060002) *[VHLS0006]
- ☐ Lip Corner Seals (74060001) *[VHLS0007]
- ☐ Filler Pads (VHLFP) *[PM100006]
- ☐ BumperToppers™ (BTVL) *[BTVL0002]



*** Note:** Installation Instruction part numbers are shown in *italics*. If a component or option is checked off on this sheet and it has a part number in brackets, those instructions must ship with the unit.

RHC# _____

No. of Units

Hardware Bags Sent:

Qty.

VHLS _____

End Seal _____

Lip Seal _____

BumperTopper _____

Filler Pad _____

Describe packaging type & number of shipping containers:

Comments:

WARRANTY POLICY

Rite-Hite warrants that the **VHLS Vertical Under-Leveler Seal**, including Filler Pads, End Seals, and Vertical Lip Corner Seals, will be free of defects in design, materials, and workmanship for a period of 365 days from the date of shipment. All claims for breach of this warranty must be made within 30 days after the defect is or can, with reasonable care, be detected and in no event more than 395 days after shipment. In order to be entitled to the benefits of this warranty, the products must have been properly installed, maintained, operated within its rated capacities, and not otherwise abused.

Rite-Hite expressly disclaims all implied warranties including the implied warranties of merchantability and fitness.

In the event of any defects covered by this warranty, Rite-Hite will remedy such defects by repairing or replacing any defective parts, bearing only the cost of the parts and transportation of those parts. This shall be the exclusive remedy for all claims whether based on contracts, negligence, or strict liability.

Rite-Hite shall not in any event be liable for any loss of use of any equipment or incidental or consequential damages of any kind.

“Our mission is to improve industrial safety, security and productivity worldwide through quality and innovation.”



Rite-Hite Environmental Enclosures Corporation
8900 North Arbon Drive
P.O. Box 245020
Milwaukee, WI 53224-9520