

Spill Bucket Insert Installation Instructions

LINEBACKER[®]

(Retrofit insert for OPW 2100 Series only)

Enclosed Materials:

LINEBACKER[®] spill bucket insert | Sealing boot and clamps | 3/4" expansion plug | Sealant (1 double tube or qt. bucket for each 4 LBs)

Required Tools:

Meter for measuring HC vapors | OSHA approved safety equipment | Safety glasses | Protective gloves (N-DEX rubber or equal) | Metal file
Sorbent material and disposal bucket | Reciprocating saw (diamond blades) | Sandpaper or emery cloth | Cleaning Solution (Acetone or equal)
Fast Orange (hands cleaner) | Tape measure | Basic hand tools (wrenches, pliers, screw drivers, etc) | Ratchet and socket set with 12" extension
Disposable rags or hand towels | Twin tube caulk gun (10oz tubes-high viscosity) | Pipe thread sealant

General Instructions:

- Survey existing spill bucket for retrofit applicability
 - Measure threaded riser height before coupler. 5.5" Minimum exposed height required. If less than 5.5" install longer threaded nipple to achieve minimum required height. Some applications may require the substitution of a low profile fill/vent coupler adapter.
 - Measure inner diameter (ID) of existing spill bucket entrance opening, ID must be between 11.0" to 11.5"
 - Measure Inner depth of existing spill bucket. Depth must be between 11.0" to 14.0" from lower spill bucket surface to grade
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Installation Instructions:

1. Inspect LINEBACKER[®] kit to verify contents
 2. Set up barricades and barriers as required per applicable OSHA and local safety standards.
 3. Clean out any debris inside existing spill bucket. (*Spill bucket must be dry.*)
 4. Assure degassed atmosphere
 5. With fill cap tight in place, cut off all tabs on inner upper edge inside spill bucket flush with rim. (*Recommend reciprocating saw with a diamond blade.*)
 6. Remove existing drain back valve, if present, at bottom of spill bucket
 7. Place a bead of sealant (*supplied*) on edge of drain opening. Install expansion plug (supplied) into drain-back hole cavity and gently snug tensioning nut (*a very small amount of dish soap may be used to lubricate the plug*)
 8. Apply sealant to completely cover boiler plug
 9. Remove fill cap, fill/vapor adaptor, and drop tube. (*Be sure not to unscrew the fill riser pipe unless riser is to be replaced.*)
 10. Test-fit the LINEBACKER[®] by sliding the inner sleeve around the fill pipe inside the existing spill bucket. Mark the height of the inner ring on the fill pipe and the outer ring on the spill bucket rim.
 11. Clean with Acetone and abrade with sandpaper the metal rim of existing spill bucket where the top of LINEBACKER[®] will be sealed.
 12. Apply a bead of sealant to fill pipe at marked inner ring height.
 13. Slide LINEBACKER[®] into position
 14. Apply a liberal amount of sealer to the fill pipe and the LINEBACKER[®] inner ring where the sealing boot (*supplied*) comes into contact
 15. Fill cavity between LINEBACKER[®] inner sleeve and riser pipe with sealant. (*This will form a secondary seal.*)
 16. Install sealing boot and tighten clamps
 17. Replace fill tube, fill adaptor, and tighten fill cap. (*Use appropriate pipe thread sealants*)
 18. Install foam backer rod (*supplied*) between LINEBACKER[®] and existing spill bucket leaving a 3/8" to 1/2" deep gap to upper edge of LINEBACKER[®]
 19. Fill gap between LINEBACKER[®] and existing spill bucket with sealant providing a crowned or sloped sealant edge.
 20. Clean up excess sealant, remove debris and replace spill bucket lid
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Supplemental Installation Instructions: Follow the instructions below if spill bucket threaded bottom is damaged and unable to hold fill riser.

Items 1 through 6 are the same as above

7. Drill 1" diameter hole in bottom of damaged spill bucket and use a Reciprocating saw to cut out bottom of spill bucket, 1" away from center boss in spill bucket bottom. Remove threaded bottom of the spill bucket from tank fill pipe. (*Important: Take care not to spin the tank riser pipe.*)
 8. Install new 4" Schedule 40 coupling on tank fill pipe. (*Use appropriate pipe thread sealants*)
 9. Re-install fill pipe section confirming appropriate length.
 10. Install self sealing minimal expanding foam, e.g. STUF[®] (*not supplied*) material to exposed area of backfill
 11. Install LINEBACKER[®] per standard instructions above. Remove fill cap, fill/vapor adaptor, and drop tube. *Be sure not to unscrew the threaded riser unless riser is to be replaced.*
 12. Test-fit the LINEBACKER[®] by sliding the inner sleeve around the fill riser inside the existing spill bucket. Mark the height of the inner sleeve on the fill riser
 13. Apply a bead of supplied sealant (*supplied*) to the fill pipe at marked height.
 14. Slide LINEBACKER[®] into position
 15. Apply a liberal amount of sealer to mating surface of sealing boot and threaded riser
 16. Fill cavity between LINEBACKER[®] inner collar and riser pipe with sealant to form secondary seal
 17. Apply a liberal amount of sealer to mating surface of sealing boot and linebacker
 18. Install sealing boot with bonded reducer and tighten clamps
 19. Replace fill tube, fill adaptor, and tight fill cap. *Use appropriate pipe thread sealants*
 20. Install foam backer rod around perimeter of LINEBACKER[®] between LINEBACKER[®] and damaged spill bucket leaving a 3/8" to 1/2" gap to upper edge of LINEBACKER[®]
 21. Fill remaining gap between LINEBACKER[®] and damaged spill bucket with sealant providing a crowned upper sealant edge.
 22. Clean up excess sealant, remove debris and replace spill bucket lid
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Polysulfide Double Tube Sealant Instructions for the **LINEBACKER**[®] Spill Bucket Insert

1. Before applying make sure that area to receive the sealant is free of moisture and cleaned with Acetone, Xylene or Methyl Ethel Ketone (MEK). If necessary scuff area for proper adhesion. For more information go to www.preventiontechnologiesinc.com.
2. Load tube sealant into dispensing gun (*do not separate tubes*).
3. Remove plugs from tubes and save (*a little may seep out, wipe off before next step*).
4. Install the static mixing nozzle making sure thumbscrew collar is tight.
5. Cut the tip of mixing nozzle to the desired bead size (*Be careful not to cut back too far or the static mixer deflectors will come out of the mixing nozzle*).
6. Squeeze trigger to release about 8" to 10" of paste and discard.
7. Apply sealant by squeezing the gun trigger until desired amount is applied. Varying the speed of the gun/nozzle movement will change the amount of sealant applied. To stop the flow, press trigger release.
8. To save unused sealant in the twin tubes, remove mixing nozzle, clean off any surplus with heavy duty paper towels, plug the tubes with the retained plugs, and put thumbscrew back on.
9. Discard used nozzle. Install new mixing nozzle when using the remainder of the sealant (*If saved portion is not to be used within 18 months then squeeze remainder into a scrap container and discard after 24 hours as normal trash*).
10. Cleaning can be done with the products mention in item #1.

Polysulfide Bucket Sealant Instructions for the **LINEBACKER**[®] Spill Bucket Insert

1. Before applying make sure that area to receive the sealant is free of moisture and cleaned with Acetone, Xylene or Methyl Ethel Ketone (MEK). If necessary scuff area for proper adhesion. For more information go to www.preventiontechnologiesinc.com.
2. Remove the catalyst, part B, and the plastic separation sheet from the bucket by placing one hand on the plastic sheet, squeezing it to the edge of the bucket and pulling on the plastic sheet. (*Set aside for discarding later*)
3. Scrape all of Part B from the jar into Part A in the bucket, then put a small amount of part A into the Part B container and stir until the inside of the container is completely coated and gray in color (*this will render the container environmentally safe for disposal*).
4. Mix Part A and Part B using a 5" spiral paint mixer and a 2 speed Milwaukee Holehog[®] drill motor or equal until paste is thoroughly blended. (*THE SEALANT IS THOROUGHLY MIXED WHEN IT IS UNIFORM IN COLOR WITH NO BLACK, GRAY OR WHITE STREAKS VISIBLE*)
5. Apply sealant by hand or mixing stick.

General Notes:

1. Wear multiple layers of N-DEX rubber gloves so as to be able to peel off to keep hands clean during applications. Also recommend long sleeve shirts or sleeve protectors.
2. Tools can be cleaned with Xylene. Hands and skin can be cleaned with Fast Orange or equivalent.
3. There are no high end volatiles. The sealant has an order similar to new auto tires and by itself should not require any special respiratory equipment or ventilation (*as described by the manufacturer*). However normal OSHA requirements if any should be followed in any confined space or when other hazardous vapors are present.
4. Sealant sets up in about 2 hours, cures fully in 24 hours at 70°F and continues to gain strength for approximately 7 days.
5. For double tube application allow the unused portion of thoroughly mixed sealant to cure for safe disposal. The hardened sealant is a non-hazardous solid.
6. For bucket application place the plastic sheet and empty Part B jar into bucket and snap cover. This allows the unused portion of the thoroughly mixed sealant to be safely discarded.