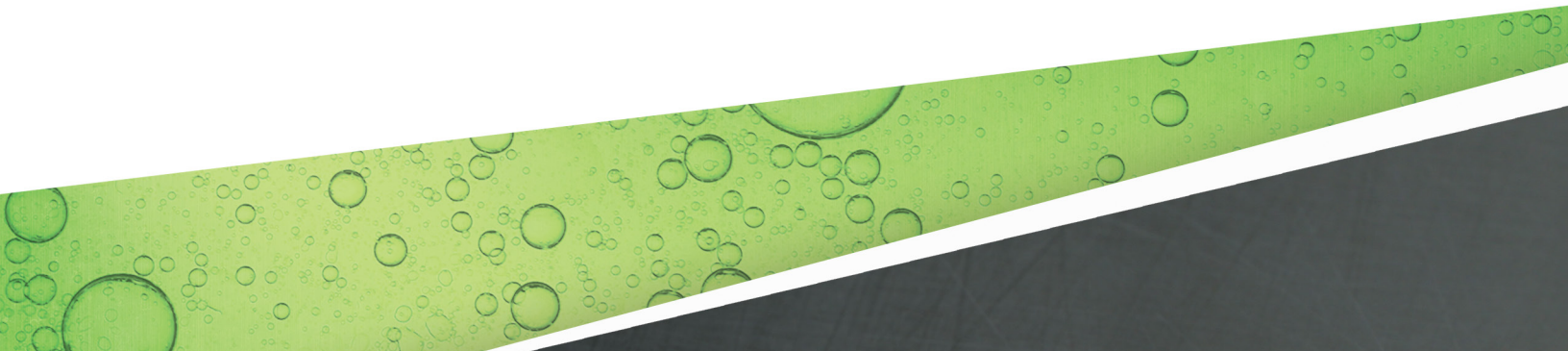


SINGLE AND DOUBLE WALL RIGID ENTRY BOOTS

INSTALLATION GUIDE



The information in this publication is provided for reference only. While every effort has been made to ensure the reliability and accuracy of the information contained in this manual at the time of printing, we recommend that you refer to “franklinfueling.com” for the most current version of this manual. All product specifications, as well as the information contained in this publication, are subject to change without notice. Franklin Fueling Systems does not assume responsibility and expressly disclaims liability for loss, damage, or expense arising out of, or in any way connected with, installation, operation, use, or maintenance by using this manual. Franklin Fueling Systems assumes no responsibility for any infringement of patents or other rights of third parties that may result from use of this manual or the products. We make no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Copyright © 2018 Franklin Fueling Systems, LLC, Madison, WI 53718. All world rights reserved. No part of this publication may be stored in a retrieval system, transmitted, or reproduced in any way, including, but not limited to, photocopy, photograph, magnetic, or other record, without the prior written permission of Franklin Fueling Systems.

For technical assistance, please contact:

Franklin Fueling Systems
3760 Marsh Rd.
Madison, WI 53718
USA

franklinfueling.com
3760 Marsh Rd. • Madison, WI 53718, USA
Tel: +1 608 838 8786 • Fax: +1 608 838 6433
Tel: USA & Canada +1 800 225 9787 • Tel: UK +44 (0) 1473 243300
Tel: Mex 001 800 738 7610 • Tel: DE +49 6571 105 308 • Tel: CN +86 10 8565 4566

Carbon Sreies is a trademark and APT is a registered trademark of Franklin Electric Company, Inc.
Encore is a registered trademark of Gilbarco Inc.
Ovation is a trademark of Wayne Fueling Systems.
Loctite is a registered trademark of Henkel AG & Co. KGaA.

771-244-00 r7

Contents

Introduction	1
Conventions used in this manual	1
Questions and concerns	1
Operating precautions	1
Installing a rigid entry boot.....	3
Installing a rigid entry boot in a polyethylene sump.....	3
Cutting back the XP pipe.....	5
Installing ducting.....	7
Installing XP pipe with swage fittings	8
Installing 2" pipe with swage fittings.....	8
Installing 1½" and 1¾" pipe with swage fittings.....	9
Installing a rigid entry boot in a round fiberglass sump.....	10
Installing a REB-DW double wall rigid entry boot	13
Parts required	13
Tools and equipment required	13
Procedure	14
Installing a ducted double wall rigid entry boot	19
Parts required	19
Tools and equipment required	19
Procedure	20
Validate the integrity of the interstitial space	29

Intentionally Blank

Introduction

Conventions used in this manual

NOTE: Provides helpful supplementary information.

IMPORTANT: Provides instructions to avoid damaging hardware or a potential hazard to the environment, for example: fuel leakage from equipment that could harm the environment.

⚠ CAUTION: Indicates a potentially hazardous situation that could result in minor or moderate injury if not avoided. This may also be used to alert against unsafe practices.

⚠ WARNING: Indicates a potentially hazardous situation that could result in severe injury or death if not avoided.

⚠ DANGER: Indicates an imminently hazardous situation that will result in death if not avoided.

Questions and concerns

In case of emergency, follow the procedures established by your facility. If you have questions or concerns about safety or need assistance, use the information below to contact Franklin Fueling Systems (FFS):

franklinfueling.com

3760 Marsh Rd. • Madison, WI 53718, USA

Tel: +1 608 838 8786 • Fax: +1 608 838 6433

Tel: USA & Canada +1 800 225 9787 • Tel: UK +44 (0) 1473 243300

Tel: Mex 001 800 738 7610 • Tel: DE +49 6571 105 308 • Tel: CN +86 10 8565 4566

Operating precautions

FFS equipment is designed to be installed in areas where volatile liquids such as gasoline and diesel fuel are present. Working in such a hazardous environment presents a risk of severe injury or death if you do not follow standard industry practices and the instructions in this manual. Before you work with or install the equipment covered in this manual, or any related equipment, read this entire manual, particularly the following precautions:

IMPORTANT: When installing pipe into entry boots, piping must be as close to perpendicular to the sump walls as possible. Entry angles that are not perpendicular can cause excessive stress, which may kink the pipe.

IMPORTANT: Do not install pipe entries into the bottom of any sump.

IMPORTANT: Flexible and ducted entry boots are designed to seal to the flat walls of FFS sumps.

IMPORTANT: During piping installation, make sure the scuff guard is trimmed back to the outside of the sump wall. Otherwise, the entry boots will not seal correctly to the scuff guard layer, and system integrity could be compromised.

IMPORTANT: The use of Bostik, or any equivalent marine-grade, urethane sealant, is optional and should be used only on the exterior of the sump entry.

⚠ CAUTION: Use only original FFS parts. Substituting non-FFS parts could cause the device to fail, which could create a hazardous condition and/or harm the environment.

⚠ WARNING: You must read, understand, and follow the procedure and safety information in this manual.

⚠ WARNING: Always wear Personal Protective Equipment (PPE) appropriate for the work site and in accordance with local and national regulations.

⚠ WARNING: The part described in this document is one element of a system. All components of this system should be installed according to the manufacturer's specifications so that the system's integrity is not compromised. Test the complete system after installation according to local, state and federal laws to ensure its proper operation. Failure to properly verify operation could lead to environmental contamination.

⚠ WARNING: Follow all federal, state, and local laws governing the installation of this product and its associated systems. When no other regulations apply, follow NFPA codes 30, 30A, and 70 from the National Fire Protection Association. Failure to follow these codes could result in severe injury, death, serious property damage, and/or environmental contamination.

⚠ WARNING: Follow all codes that govern how you install and service this product and the entire system. Always lock out and tag electrical circuit breakers while installing or servicing this equipment and related equipment. A potentially lethal electrical shock hazard and the possibility of an explosion or fire from a spark can result if the electrical circuit breakers are accidentally turned on while you are installing or servicing this product. Refer to this manual (and documentation for related equipment) for complete installation and safety information.

⚠ WARNING: Make sure you check the installation location for potential ignition sources such as radio waves, ionizing radiation, and ultrasound sonic waves. If you identify any potential ignition sources, you must make sure safety measure are implemented.

⚠ WARNING: Always secure the work area from moving vehicles. The equipment in this manual is usually mounted underground, so reduced visibility puts service personnel working on it in danger from moving vehicles that enter the work area. To help prevent this safety hazard, secure the area by using a service truck (or some other vehicle) to block access to the work area.

⚠ WARNING: Before you enter a containment sump, check for the presence of hydrocarbon vapors. Inhaling these vapors can make you dizzy or unconscious, and if ignited, they can explode and cause serious injury or death. Containment sumps are designed to trap hazardous liquid spills and prevent environmental contamination, so they can accumulate dangerous amounts of hydrocarbon vapors. Check the atmosphere in the sump regularly while you are working in it. If vapors reach unsafe levels, exit the sump and ventilate it with fresh air before you resume working. Always have another person standing by for assistance.

Installing a rigid entry boot

NOTE: Sumps must be installed at a depth where the top of the island form (or court, if no island is used) is flush with the top of the polyethylene or fiberglass sump.

Top of island form (or court) to center of entry boot	Sump Height
12-15"	Medium burial minus 9" (M-9)
15-18"	Medium burial minus 6" (M-6)
18-21"	Medium burial minus 3" (M-3)
21-28"	Medium burial (M)
27-30"	Deep burial minus 9" (D-9)
30-33"	Deep burial minus 6" (D-6)
33-36"	Deep burial minus 3" (D-3)
36-43"	Deep burial (D)

Installing a rigid entry boot in a polyethylene sump

NOTE: In the following step, mark the hole so the bottom edge of the fitting is at least 2" from the bottom of the sump.

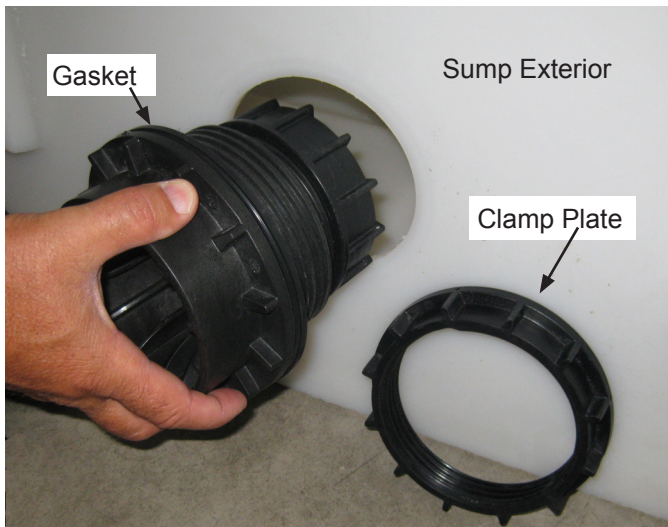
1. Mark hole location for the piping entrance.



2. Drill a 5" hole at the location your marked in the previous step.



3. Remove the clamp plate.



IMPORTANT: In the following step, the use of Bostik, or any equivalent marine-grade, urethane sealant, is optional and should be used only on the exterior of the sump entry.

4. Place the fitting and the flat gasket in the opening from the outside.
5. Thread the clamp plate onto the fitting from the inside of the sump, and hand tighten it.



IMPORTANT: In the following step, do not over-tighten the fitting. Use a chain wrench or spanner wrench as shown below. Do not use a pipe-wrench or adjustable/slip joint pliers.

6. Use a chain wrench or spanner wrench to turn the clamp plate an additional $\frac{1}{4}$ turn.

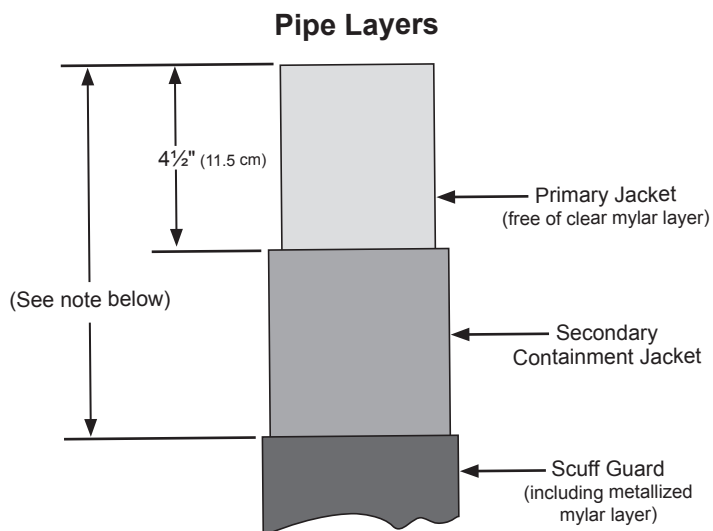


7. Insert the XP pipe into the fitting.



Cutting back the XP pipe

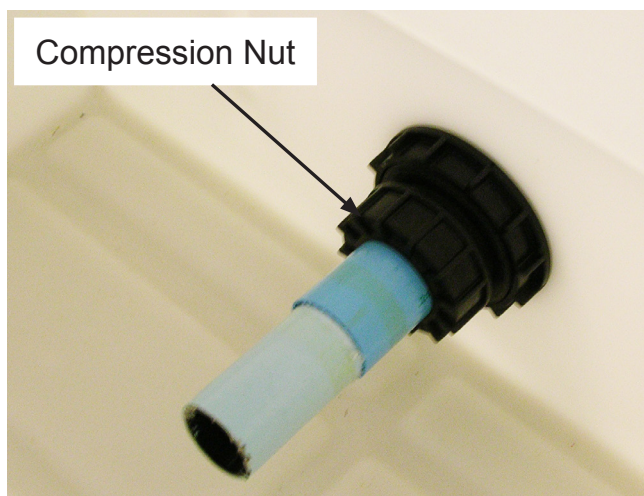
Once the pipe run is pulled and each section is cut to length, square off the end of the pipe, deburr it, and then proceed with the cutback. If you are using secondary contained (SC) piping, cut back the scuff guard layer so that it is even with or outside the sump wall, and then cut back the SC layer $4\frac{1}{2}$ " (11.5 cm).



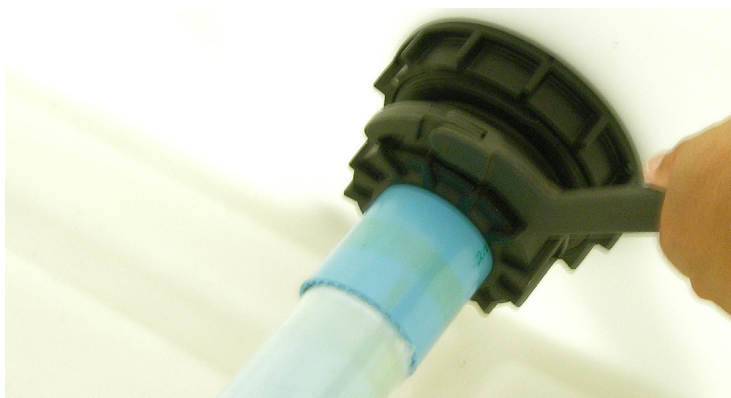
NOTE: The scuff guard must be cut back to be even with, or outside of, the sump wall ensuring that the entry boot seals on the SC jacket and not on the scuff guard layer.

NOTE: In the following step, install the pipe seal before you install the entry boot.

1. From the inside, loosen the compression nut and install the XP pipe.
2. Tighten the compression nut hand-tight.



3. Use a chain wrench or spanner wrench to turn the compression nut an additional $\frac{1}{4}$ turn.



NOTE: If a leak occurs during the hydrostatic test, turn the compression nut up to an additional $\frac{1}{4}$ turn.

NOTE: If you find a leak between the pipe seal and the outer wall of the secondary layer, remove the compression nut and check for debris between the secondary layer of the XP pipe and the seal. When this is done, repeat steps 2 and 3.

⚠ CAUTION: Overtightening can break the compression nut. Do not overtighten it.

Installing ducting

NOTE: The following procedure shows the single-wall sump, but it is also valid for installing ducting in the double-wall sump.

NOTE: See *Ducting System Installation Instructions* (part number 771-206-00) for more information about duct installation.

NOTE: If you're going to install ducting in a single-wall sump, it is easier to install the duct boot before you install the fitting in the sump.

1. Install the larger end of the duct boot on the fitting.

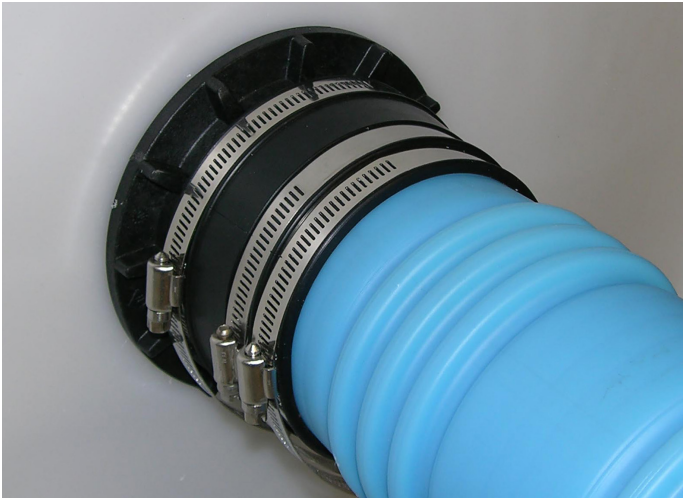


IMPORTANT: In the following step, the use of Bostik, or any equivalent marine-grade, urethane sealant, is optional and should be used only on the exterior of the sump entry.

2. Install a band clamp on the duct boot to secure it to the fitting. Place the two outside band clamps loosely on the boot, and tighten them after you install the duct.



3. Install the prepared duct end into the duct boot.



NOTE: In the following step, do not overtighten the band clamps.

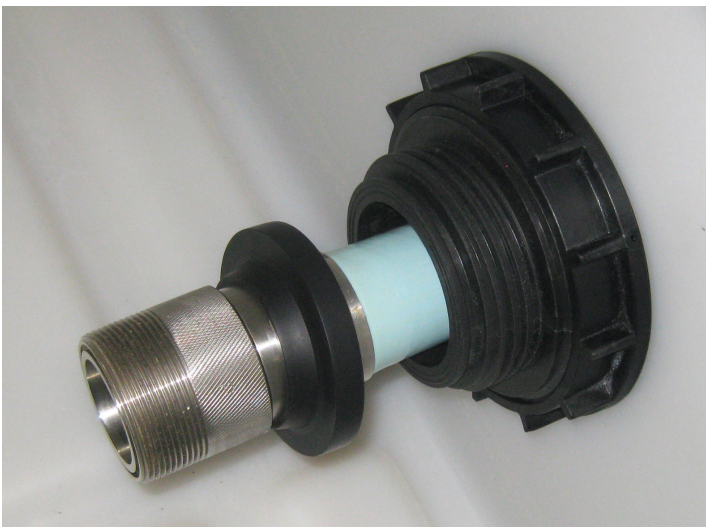
4. Install two band clamps on the outside of the duct boot, and tighten them to 20 inch-lbs of torque.

Installing XP pipe with swage fittings

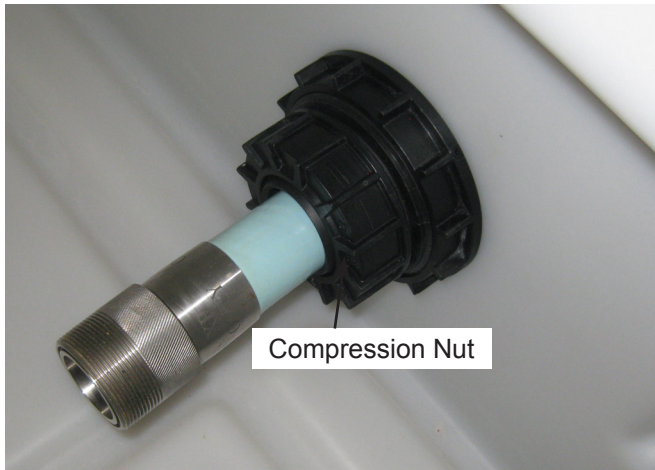
Installing 2" pipe with swage fittings

This procedure is basically the same as "Installing a rigid entry boot in a poly sump" with the following modifications.

1. Remove the compression nut and pipe seal.
2. Insert the piping through the fitting.
3. Pull the pipe seal over the swage fitting and pipe, and reinstall it on the rigid entry fitting.



4. Install the compression nut.



NOTE: You do not use the snap fitting and compression nut insert.

Installing 1½" and 1¾" pipe with swage fittings

If you are using 1½" or 1¾" pipe, you must be insert it through the fitting before you install the swage fitting.

1. Remove the compression nut, pipe seal, compression nut Insert and snap fitting from the rigid entry boot body.

IMPORTANT: In the following step, the use of Bostik, or any equivalent marine-grade, urethane sealant, is optional and should be used only on the exterior of the sump entry.

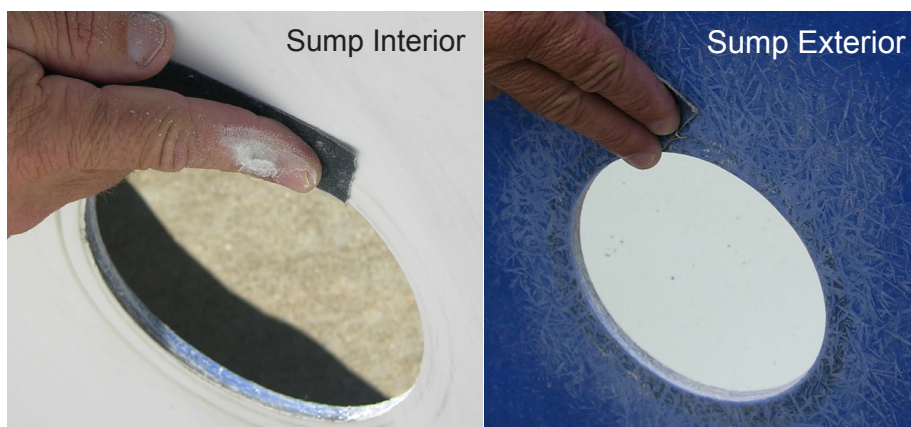
2. Install the rigid entry boot, and insert the XP pipe.
3. Slide the snap fitting, pipe seal, compression nut insert, and compression nut onto the pipe
4. Reassemble the rigid entry boot components.
5. Install the compression nut and tighten it hand-tight.
6. Use a chain wrench or spanner wrench to turn the compression nut an additional ¼ turn.

Installing a rigid entry boot in a round fiberglass sump

The REB-R and RDEB-R fitting can be installed on rounded sumps with a diameter of 42" (1066.8 cm) or greater. The process is the same as shown earlier with one important difference: the assembly requires a double-tapered seal (sump exterior) and a keyed adapter ring (sump interior) instead of the one seal used for flat surfaces.

IMPORTANT: If the inner surface has smooth gel coat, **do not sand it!** If the inner surface has rough gel coat, lightly sand it until it is smooth. **Do not sand through the gel coat!**

1. After you drill the 5" hole in the fiberglass sump, use 80 grit sandpaper to smooth the outside surface for 2" around the opening. If the inner surface has smooth gel coat, **do not sand it!** If the inner surface has rough gel coat, lightly sand it with 80 grit sandpaper until it is smooth. **Do not sand through the gel coat!** Mark the hole so the bottom edge of the fitting is at least 2" from the bottom of the sump.



⚠ CAUTION: Wear nitrile gloves when you use acetone, and refer to the MSDS for acetone for additional safety information.

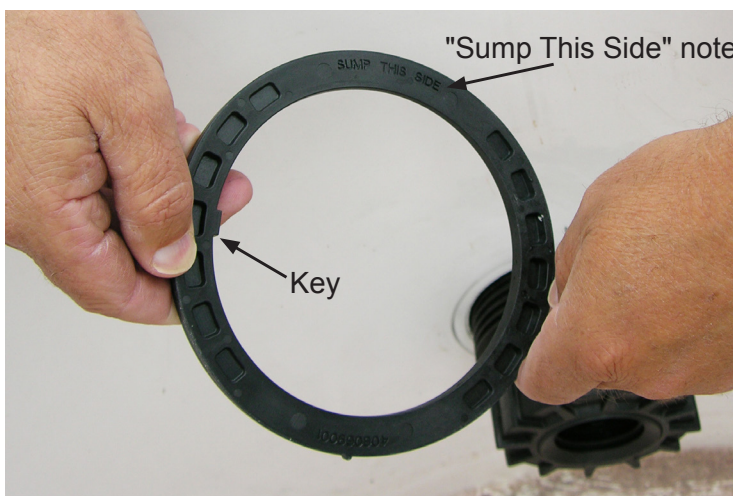
2. Use acetone and lint-free rags to clean in and around the hole (both inside and outside the sump).



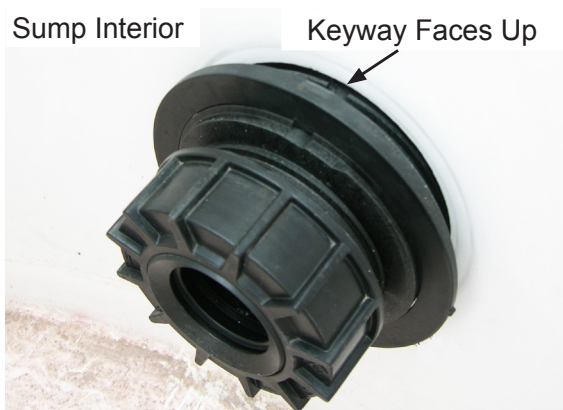
3. From the outside, install the double-tapered gasket between the fitting and the sump. Position the seal so that the wide thicknesses are to the sides. (The tab on the gasket will face up. See below.)



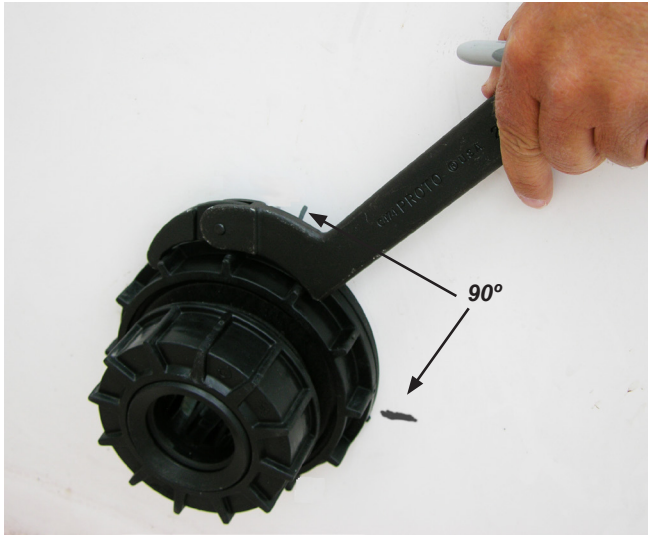
4. From the inside of the sump, install the keyed adapter ring on the fitting.



5. Position this ring such that the sump note is towards the sump wall and the key engages the keyway on the fitting. This results in the wide thicknesses of the ring being on top and bottom.



6. Install the Locking Ring on the fitting and tighten it hand-tight. Make a mark on the fitting and sump wall as shown.



7. Use a spanner wrench or chain wrench to tighten the locking ring 90° from the hand-tightened position.
8. Go to "Installing a rigid entry boot in a polyethylene sump" earlier in this manual. Start at step 7 and follow the procedure to the end to complete the installation.
9. If a leak occurs during the hydrostatic test, add an additional torque of not more than ¼ turn on the fitting.

Installing a REB-DW double wall rigid entry boot

⚠ WARNING: Always wear Personal Protective Equipment (PPE) appropriate for the work site and in accordance with local and national regulations.

IMPORTANT: The Loctite® EA-20NS Epoxy has a 20-minute working life, which should allow enough time to epoxy the flange channels and assemble the entry fitting onto the sump. However, it is still important to the quality of the fitting installation to complete well before epoxy working life expires. This will help with adjusting the fitting while the epoxy has not hardened yet. It helps to have parts laid out and the epoxy cartridges setup prior to beginning epoxy to save time.

Parts required

Model	Description	Stabilizer Bar Kit
602383XXXX	Carbon Series™ double wall fiberglass sump for Gilbarco Encore® dispenser models, with vacuum gauge	SBK-3
602385XXXX	Carbon Series™ double wall fiberglass sump for Wayne Ovation™ dispenser models with vacuum gauge	SBK-25

Tools and equipment required

Description	Part Number
Nitrile gloves	In UPP Essential Tool Kit (408033901)
Ratchet pipe cutter	Locally Sourced
3.75" (95 mm) hole saw	Locally Sourced
Drill	Locally Sourced
Spanner wrench	Locally Sourced
Tape measure	Locally Sourced
Markers and/or pencils	Locally Sourced
Respirator	Locally Sourced
Sandpaper or a sanding block (80 grit)	Locally Sourced
Assorted tools (e.g., wrenches, pliers, screwdrivers)	Locally Sourced
PPE (e.g., cut-resistant gloves, goggles, hardhat)	Locally Sourced
Caulk gun	Locally Sourced
Timer	Locally Sourced
Strap wrench	Locally Sourced
Vacuum source (appropriate for location)	Locally Sourced

Procedure

IMPORTANT: Make sure the holes you cut in the fiberglass sump are above the level of any liquid that has accumulated in the sump.

1. Measure and mark the location for the hole in the sump.



⚠ WARNING: Make sure you wear cut-resistant gloves, eye protection, and a respirator when you cut into or sand a fiberglass sump.

2. Use a drill with a 3.75" (95 mm) hole saw attachment to cut an entry hole at the location you marked on the sump.



3. Assemble the rigid entry boot in the hole. Hand tighten the boot, and make sure the inner faces of the boot contact the inner and outer surfaces of the sump around the hole.
4. Place the rigid entry boot in the opening, use a marker or pencil to mark around the entry boot inside and outside the sump, and then remove the entry boot.



IMPORTANT: When you sand around the inside of the hole, lightly sand the gel coat only until it is flat and lightly roughened where the fitting makes contact. **Do not sand through the gel coat!**

5. Use 80 grit sandpaper or a sanding block to lightly roughen (both inside and outside the sump) up to the mark you made in the previous step. Inside the sump, lightly sand the gel coat only until it is flat and lightly roughened where the fitting makes contact. **Do not sand through the gel coat!**



⚠ CAUTION: Wear nitrile gloves when you use acetone, and refer to the MSDS for acetone for additional safety information.

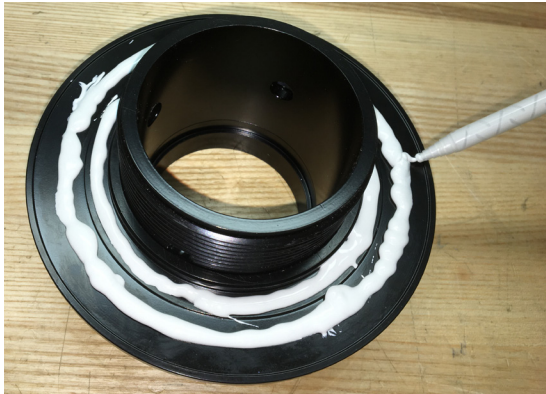
6. Use acetone and lint-free rags to clean in and around the hole (both inside and outside the sump).



7. To reduce the epoxy application time, cut 1/4" off of both mixing tips. To install a mixing tip, push it onto the epoxy cylinder, and turn mixing tip clockwise to tighten it. Insert the epoxy cylinder, with the mixing tip, into the caulk gun adapter, and then insert the assembly into the caulk gun.

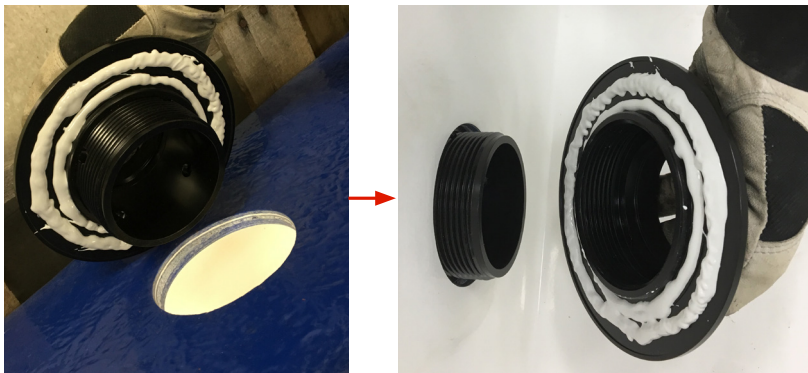


8. Use the caulk gun to squeeze a 3/8" ring of epoxy into each channel in the inner surfaces of both halves of the flange.



IMPORTANT: If necessary, you can use a strap wrench to tighten the flanges against the sump wall. Also make sure you tighten the flanges evenly onto the joiner fitting.

9. Assemble the two halves of the rigid entry boot in the hole in the sump, and then hand tighten the boot.

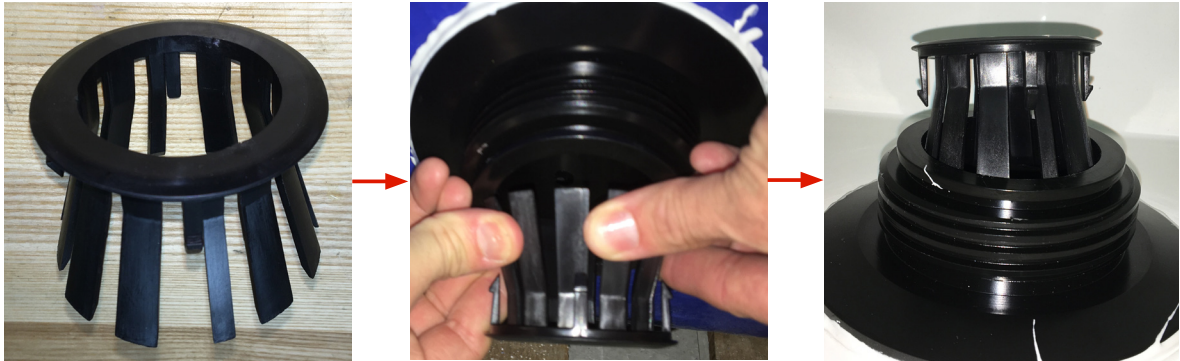


10. Use the remaining epoxy to fill in any gaps between the entry boot and the inner and outer surfaces of the sump.



IMPORTANT: Do not work with the entry boot until you have allowed the epoxy to harden for at least 1.5 hours.

11. Install the sizing adapters.



12. Stretch the gaskets, and snap them into the grooves on the inner and outer halves of the boot.



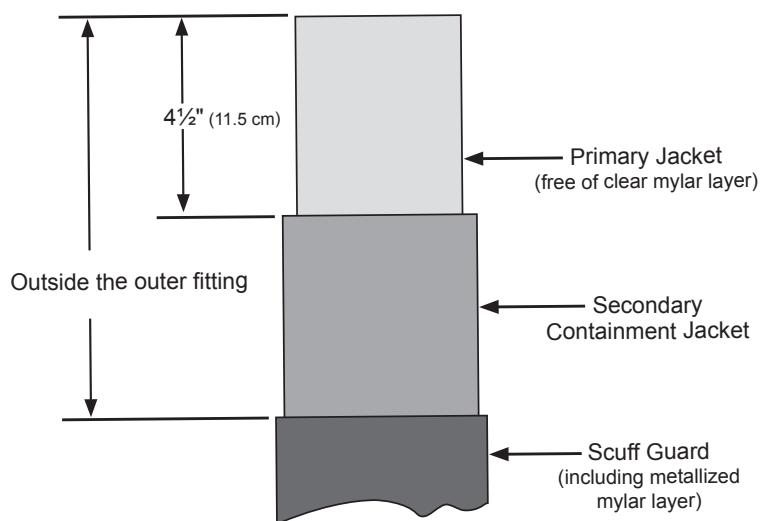
13. Place the washers on the threaded, inner and outer halves of the boot, and then thread the compression nuts loosely onto the boot. Do not tighten the compression nuts.



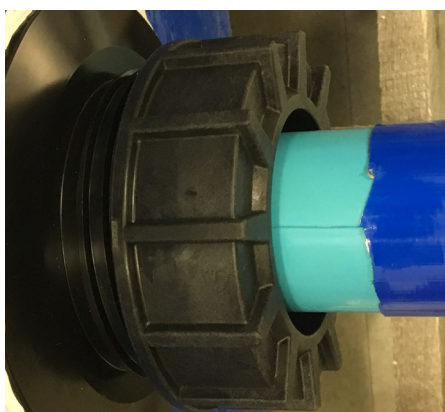
Outside the sump

Inside the sump

14. Cut back the XP pipe. The scuff guard must be cut back so that when the pipe is installed, the scuff guard is outside the outer part of the boot.



15. Insert the XP pipe.



16. Hand tighten the nuts on the inner and outer parts of the boot, and then use a spanner wrench to tighten the nuts an additional $\frac{1}{4}$ to $\frac{3}{8}$ turns.



17. Validate the integrity of the interstitial space. See "Validate the integrity of the interstitial space" at the end of this manual for more information.

Installing a ducted double wall rigid entry boot

⚠ WARNING: Always wear Personal Protective Equipment (PPE) appropriate for the work site and in accordance with local and national regulations.

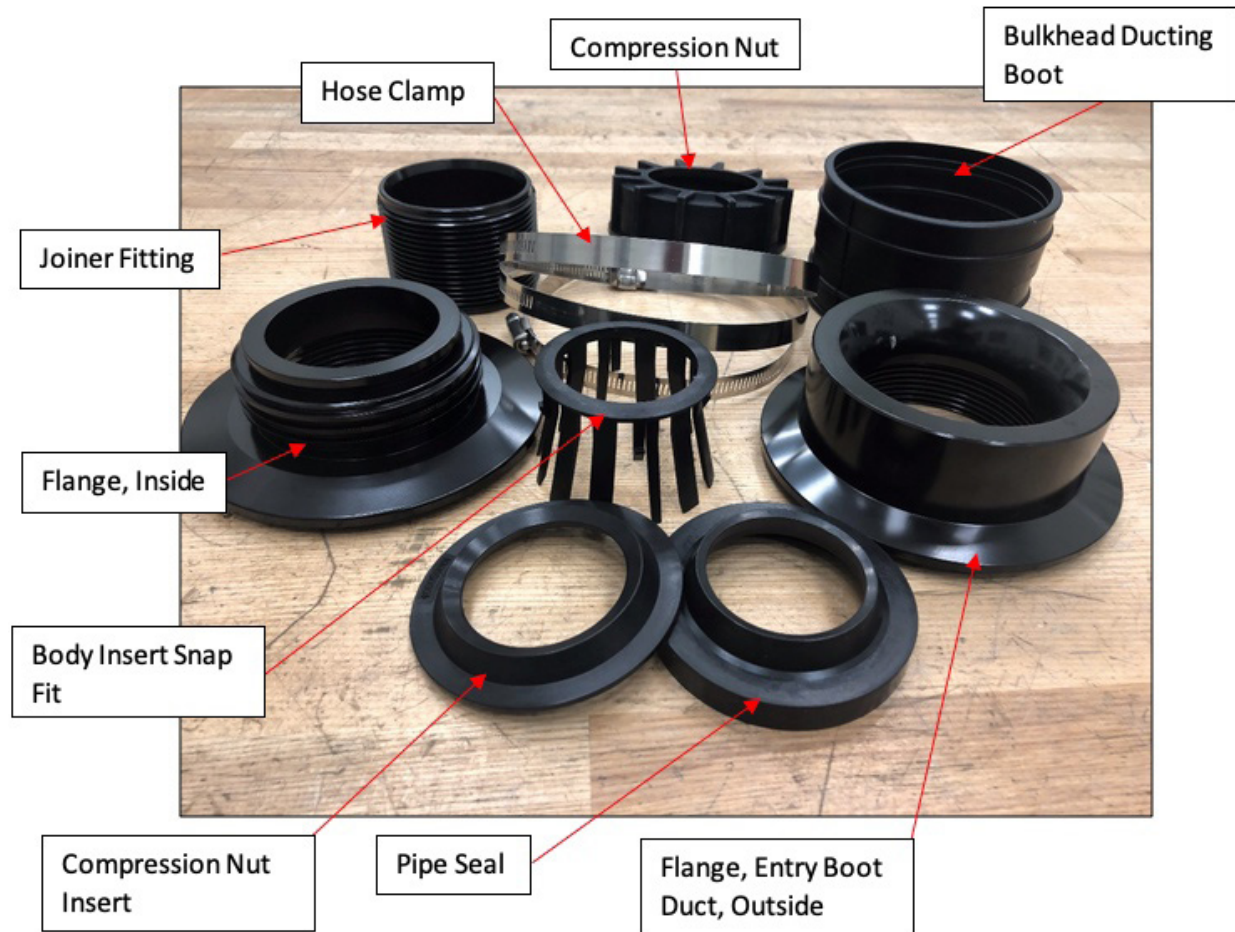
IMPORTANT: The Loctite® EA-20NS Epoxy has a 20-minute working life, which should allow enough time to epoxy the flange channels and threads on the joiner fitting and assemble the entry fitting onto the sump. However, it is still important to the quality of the fitting installation to complete well before epoxy working life expires. This will help with adjusting the fitting while the epoxy has not hardened yet. It helps to have parts laid out and the epoxy cartridges setup prior to beginning epoxy to save time.

Parts required

Model	Description	Stabilizer Bar Kit
602383XXXX	Carbon Series™ double wall fiberglass sump for Gilbarco Encore® dispenser models, with vacuum gauge	SBK-3
602385XXXX	Carbon Series™ double wall fiberglass sump for Wayne Ovation® dispenser models with vacuum gauge	SBK-25

Tools and equipment required

Description	Part Number
Nitrile gloves	In UPP Essential Tool Kit (408033901)
Ratchet pipe cutter	Locally Sourced
3.75" (95 mm) hole saw	Locally Sourced
Drill	Locally Sourced
5/16" socket (nut driver, socket wrench, or drill)	Locally Sourced
Strap wrench	Locally Sourced
Spanner wrench	Locally Sourced
Tape measure	Locally Sourced
Markers and/or pencils	Locally Sourced
Respirator	Locally Sourced
Sandpaper or a sanding block (80 grit)	Locally Sourced
Assorted tools (e.g., wrenches, pliers, screwdrivers)	Locally Sourced
PPE (e.g., cut-resistant gloves, goggles, hardhat)	Locally Sourced
Caulk gun	Locally Sourced
Timer	Locally Sourced
Vacuum source (appropriate for location)	Locally Sourced



Procedure

IMPORTANT: Make sure the holes you cut in the fiberglass sump are above the level of any liquid that has accumulated in the sump.

1. Measure and mark the location for the hole in the sump.



⚠ WARNING: Make sure you wear cut-resistant gloves, eye protection, and a respirator when you cut into or sand a fiberglass sump.

2. Use a drill with a 3.75" (95 mm) hole saw attachment to cut an entry hole at the location you marked on the sump.

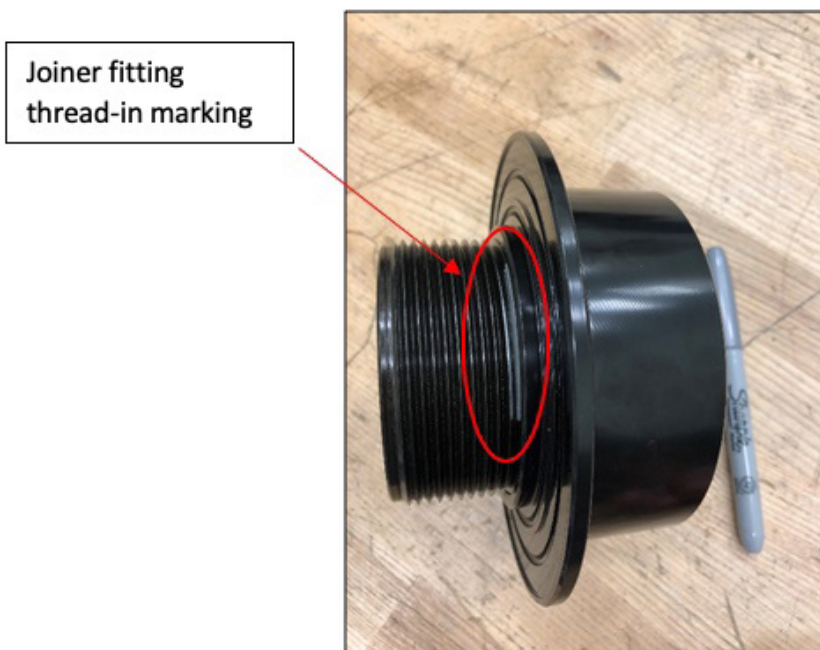


3. Assemble the rigid entry boot into the fitting hole. Loosely hand tighten the flanges onto the joiner fitting until the inner faces of the flanges contact the inner and outer surfaces of the sump. Make sure each flange is evenly tightened in comparison to the other so that the entry fitting is assembled proportionally.
4. To mark the sanding area, use a marker or pencil to mark around the profile of the flange both inside and outside the sump.



NOTE: In the following step, before you mark the joiner fitting, make sure the inner surfaces of the flanges are hand-tightened to the sump and are evenly threaded onto the joiner fitting.

5. Carefully loosen the inside flange without loosening the joiner fitting from the outside flange, and remove the assembly from the hole. Mark the flange thread-in distance on the joiner fitting with a marker according as shown below.



IMPORTANT: When you sand around the inside of the hole, lightly sand the gel coat only until it is flat and lightly roughened where the fitting makes contact. **Do not sand through the gel coat!**

6. Use 80 grit sandpaper or a sanding block to lightly roughen (both inside and outside the sump) up to the mark you made previously. Inside the sump, lightly sand the gel coat only until it is flat and lightly roughened where the fitting makes contact. **Do not sand through the gel coat!**



⚠ CAUTION: Wear nitrile gloves when you use acetone, and refer to the MSDS for acetone for additional safety information.

7. Use acetone and lint-free rags to clean in and around the hole on both sides of the sump.



8. To reduce the epoxy application time, cut 1/4" off of both mixing tips. To install a mixing tip, push it onto the epoxy cylinder, and turn mixing tip clockwise to tighten it. (Leave the other mixing tip ready for use on the second epoxy cylinder.) Insert the epoxy cylinder, with the mixing tip, into the caulk gun adapter, and then insert the assembly into the caulk gun.



IMPORTANT: Before you apply epoxy to fitting surfaces, read the following five steps, so you can complete the procedure before the epoxy hardens. Also, before you apply epoxy, squeeze a small amount onto a paper towel or rag.

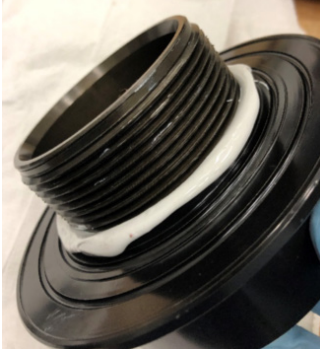
IMPORTANT: Before applying epoxy to the fitting, make sure to first squeeze out a small amount of epoxy onto a paper towel or rag.

9. Apply the epoxy to the joiner-fitting threads starting at the top thread groove. Make sure the epoxy fills in the thread grooves as shown below. Be careful not to cover the thread-in mark you made previously.

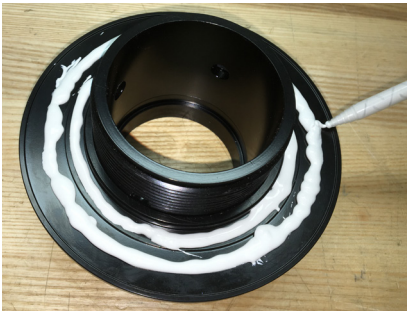


IMPORTANT: In the following step, use a tool, such as a strap wrench, that will not damage the threads.

10. Use a strap wrench to thread the joiner fitting into the flange (with the epoxy side first). Tighten to the mark you made previously. Use a strap wrench.



11. Squeeze 3/8" rings of epoxy into all flange channels. If the epoxy cylinder runs out, remove the mixing tip, and place it on a new cylinder. Install it into the caulk gun insert and then into caulk gun as you did previously.



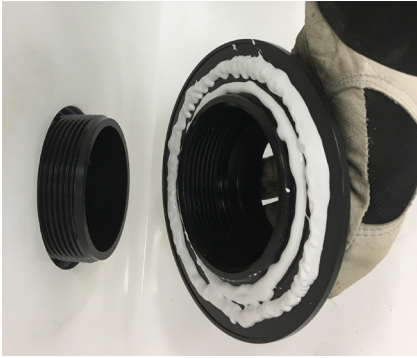
IMPORTANT: Do not work with the entry boot until you have allowed the epoxy to harden for at least 1.5 hours.

12. Spread the same amount of epoxy on the end of the joiner fitting as you did for the other end of the joiner fitting.

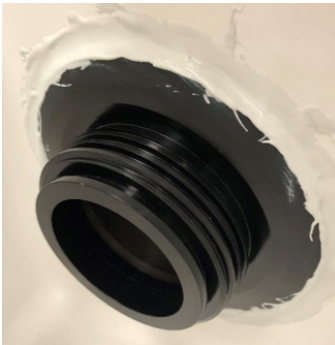


NOTE: In the following step, although it is not shown, the joiner fitting will have epoxy on the threads.

13. Assemble the entry fitting into the hole. Thread the remaining flange onto the joiner fitting until the assembly is hand tight on the sump. Expect some epoxy to ooze out of the sides of the flange, this helps to seal the entry fitting. Tighten the remaining flange with a strap wrench. If not available, use a tool that will not damage e-coat on flange.



14. Squeeze the remaining epoxy around the outer profile of the flange to help fill gaps between the flange and the inner and outer surfaces of the sump. If necessary, use your finger to help distribute epoxy around the flange profile to ensure a consistent seal.

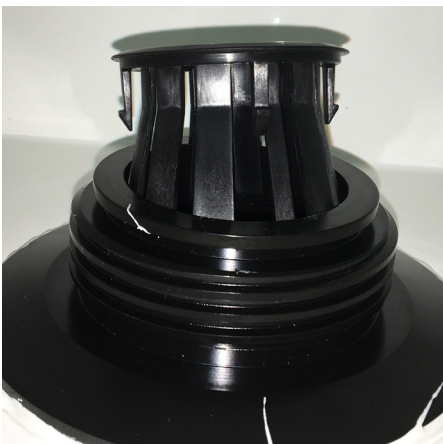


Inside the sump

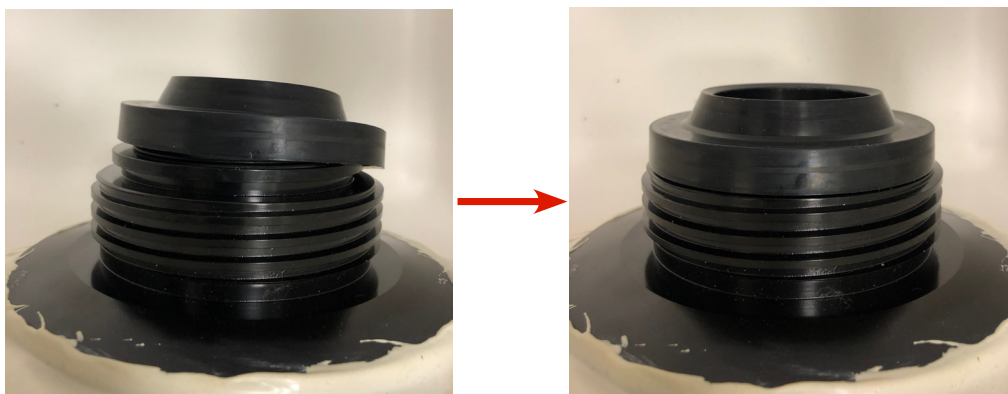


Outside the sump

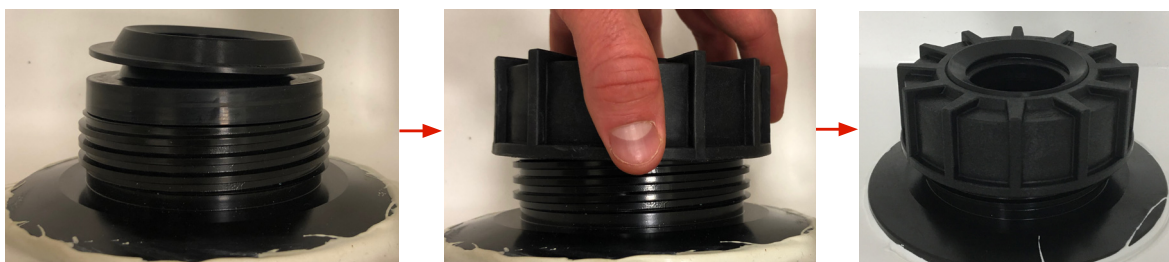
15. Install the body insert snap-fit component into the inside flange until it snaps into place.



16. Stretch the pipe seal, and until it fits securely into the groove on the inner flange.



17. Place the compression nut insert on pipe seal, and then thread the compression nut loosely onto the boot. Do not tighten the compression nut.



NOTE: See *Ducting System Installation Instructions* (part number 771-206-00) for more information about duct installation.

18. Install the larger end of the duct boot on the fitting.

IMPORTANT: In the following step, the use of Bostik, or any equivalent marine-grade, urethane sealant, is optional and should be used only on the exterior of the sump entry.

19. Install a band clamp on the duct boot to secure it to the fitting. Place the two outside band clamps loosely on the boot.

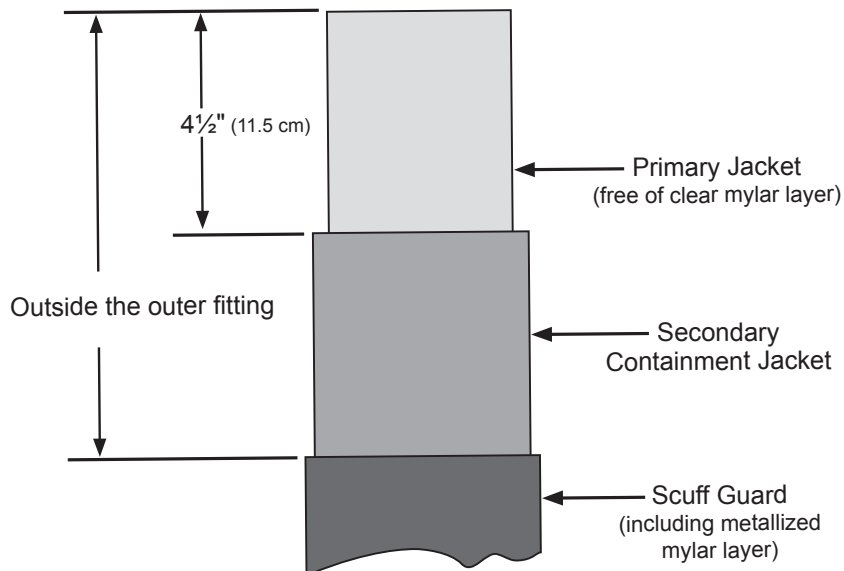


20. Install the prepared duct end into the duct boot.



NOTE: In the following step, do not overtighten the band clamps.

21. Tighten the two band clamps on the outside of the duct boot to 20 inch-lbs of torque.
22. Cut back the XP pipe. The scuff guard must be cut back so that when the pipe is installed, the scuff guard is outside the outer part of the boot.



23. Insert the XP pipe.



24. Hand tighten the nuts on the inner and outer parts of the boot, and then use a spanner wrench to tighten the nuts an additional $\frac{3}{8}$ turns.



25. Validate the integrity of the interstitial space. See the following section.

Validate the integrity of the interstitial space

Refer to the *Carbon Series™ Single Wall and Double Wall Fiberglass Dispenser Sumps Installation Guide* (part number 771-244-001) for the procedure to validate the integrity of the interstitial space between the double walls of the fiberglass dispenser sump.

Intentionally Blank

Intentionally Blank



771-244-00 r7

