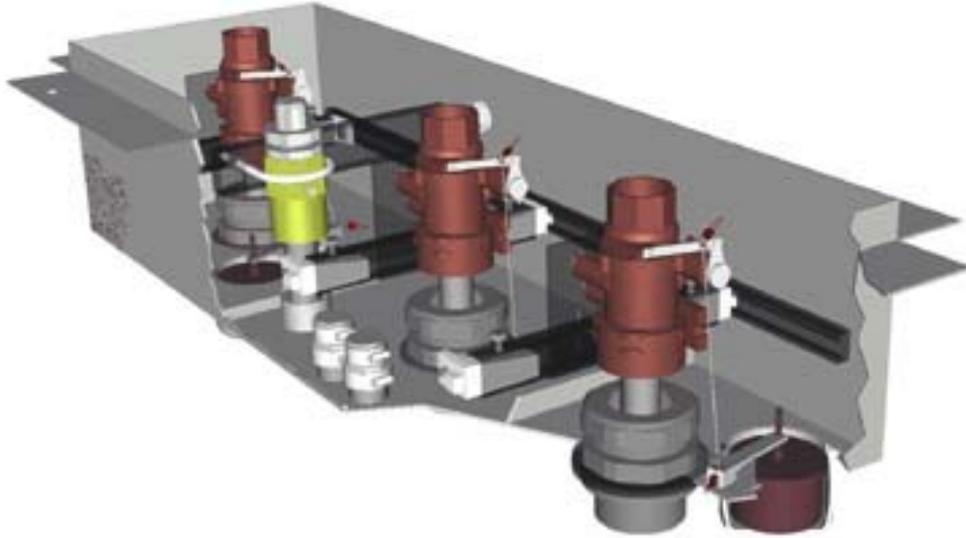


# B2000 **RETROFIT** KIT INSTALLATION INSTRUCTIONS

A FACTORY-PROVIDED KIT FOR SEALING PRODUCT AND CONDUIT ENTRIES ON LEGACY B-2000 SHALLOW UDC'S.



## **INCLUDED COMPONENTS:**

**CONTENTS SUBJECT TO  
CHANGE WITHOUT NOTICE**

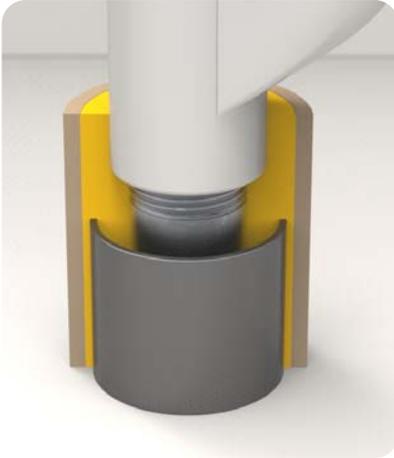
- 1x **VS-B** - Caulk tube of Black Vulkem 116 polyurethane sealant
- 3x **FR-ES1** - 2"Ø split FRP clamshell x 2.5" tall
- 3x **FR-MYE-5** - 3"Ø split FRP clamshell x 1.5" tall
- 3x **ADHESIVE-EPOXY-RETROFIT-KIT** - Bravo FRP Epoxy
- 3x Pairs of large gloves
- 3x Stir sticks
- 6x 2" hose clamps
- 1x Sheet of sandpaper
- 6x 3" hose clamps



**NOTICE!** COMPONENT COLORS ARE NOT EXACT  
AND ARE CONTRASTING FOR PURPOSES OF CLARITY.

ii-B2000-RETROFIT-KIT-14A

The fittings listed and illustrated here are common examples of what may be installed in your Bravo B-2000 series shallow steel UDC's. In many cases entry fittings were used for pipe or conduit that they were not designed for. Read every scenario below as there are valuable tips, warnings and instructions. Some may apply broadly. Bravo does not make any requirements for which combinations are acceptable, nor does Bravo specify any heights, elevations or measurements for adjustments.



## FR-ES1 RETROFIT

### FEF-EBS CONDUIT FITTING

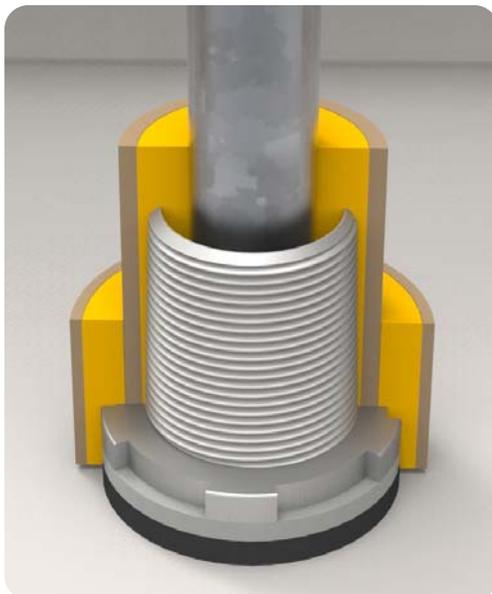
For this fitting, remove the existing boot & clamps, clean the contact surfaces of any/all contaminants, abrade the contact surfaces of both pipes and install the FR-ES1 split FRP sleeve centered over both diameters. You can pack the interior of the steel coupler with foam cord or other material first. Then pack each half with Bravo epoxy, join them together and secure with clamps to cure. Bead with vulkem where it contacts the floor.



## FR-MYE-5 RETROFIT

### MYERS HUB (MYE) CONDUIT FITTING

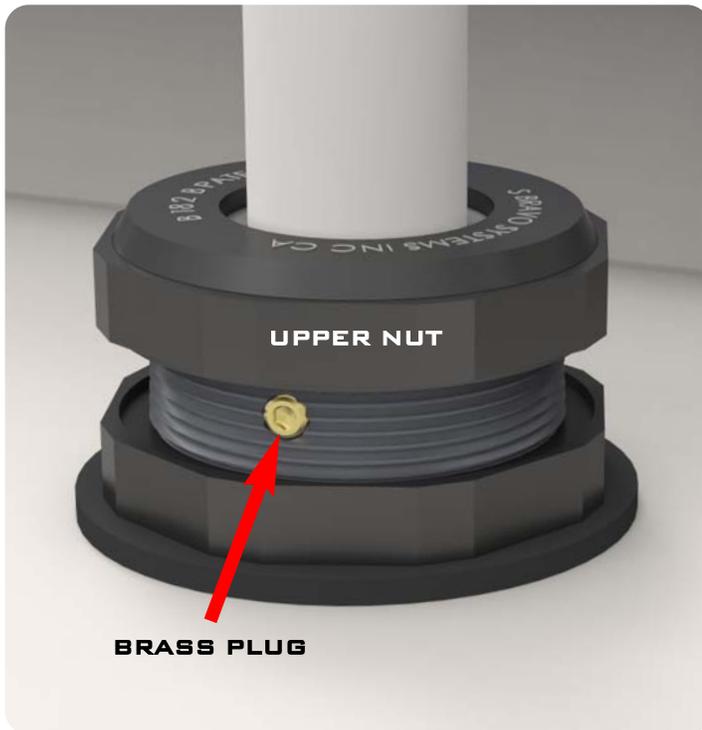
For MYE's, clean the exterior of the fitting and sand the epoxy paint off of the steel floor about 1" out from its outer diameter. Apply Bravo epoxy to interior of FR-MYE-5 split FRP sleeve and install over the MYE fitting with clamps. Ensure it is completely encapsulated with no trapped air. Then apply a generous bead of vulkem to the outside of the FRP sleeve where it contacts the floor. Be sure to re-coat any steel that was exposed from sanding / cleaning. Just above it, where commonly another pipe protrudes through and a conduit comes through that pipe, follow the FR-ES1 retrofit directions above to seal these two pipes to each other.



### BH-1-1/2 VAPOR FITTING

Clean the exterior surfaces of the fitting and repeat the instructions listed above for the Myers Hub fitting. It is common for a vapor shear valve to be threaded directly onto this type of fitting. If so, then the FR-MYE-5 should apply, but if there is a nipple above, then the FR-ES1 may also be needed. It is detailed below and shown on the left. In the case where this fitting was instead used as a conduit entry, (as shown) first install the FR-ES1 to the top-most part of the threads and the conduit that protrudes through.

## B-18-3 Compression Fitting - PRODUCT



### B-18-3 orientation

The brass secondary line test plug located within the body should be at a 90° degree angle from any flat wall. If it is at any other angle, the fitting is not installed correctly and/or the gasket is not flat against the floor.

Whether the gasket is seated firmly to the floor or not, or if the orientation is incorrect, the Vulkem sealing method outlined below is the best way to make a lasting liquid-tight seal.

**When pressure-testing the secondary:** the top nut makes this seal. The Brass plug should not be removed. If leaks occur from the top nut/donut then loosen them with WD-40 if necessary and re-seat with wet-dry grease. Then tighten the nut no more than 1/4 - 1/2 turns past hand tight.

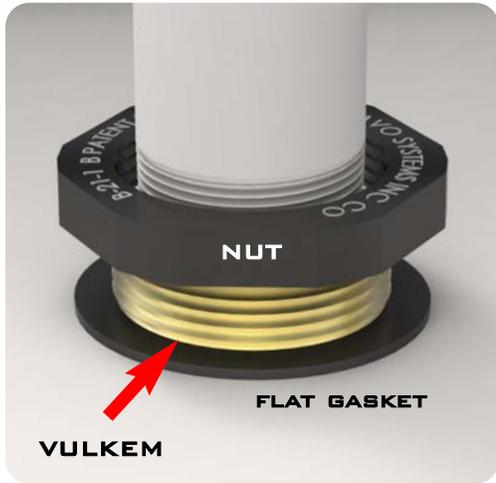
## B-18-3 Vulkem Seal



**WARNING!** The lower nut of the B-18-3 fitting must not be loosened without the compression donut securely sealed against the pipe. The upper nut holds the donut secure. If both are loosened too much the B-18-3 fitting body may drop down or fall through the bottom of the shallow pan.

After cleaning all contact areas thoroughly, use vulkem to seal between the bottom nut and flat gasket. With the top nut secured to the pipe, loosen the lower nut and apply vulkem under the nut and generously to the exposed threads of the body. Do not dislodge the flat gasket or apply vulkem between it and the floor of the shallow. Lubrication can cause it to slip loose or pinch once tightened causing a leak point.

# B-27 Compression Fitting - VAPOR



You do not need to worry about the B-27 fitting body dropping down or falling through the bottom of the shallow pan if the vapor line is threaded into the top of this fitting. If a smaller line is passing through it however, it may drop down and out so use caution and secure the body above the floor as you loosen the nut to test it.

After cleaning all contact areas thoroughly, use vulkem to seal between the nut and flat gasket and also to the exposed threads of the body. Do not apply vulkem between the flat gasket and the floor of the shallow pan or dislodge this gasket. Lubrication can cause it to slip loose or pinch once tightened causing a leak point.

## FREQUENTLY ASKED QUESTIONS:

### How do I clean up a dirty B2000 or address corrosion?

- A) Dust, blow out and/or vacuum any dry debris from the interior.
- B) Vacuum out any liquids, debris, gunk, etc..
- C) Protect any exposed test ports or threads, remove any electronic sensors.
- D) Use Acetone to clean the surfaces so a visual inspection can be made.
- E) Scrape the bottom and/or walls with a flat-blade tool. Re-vacuum.
- F) Lightly sand all areas where the factory epoxy-paint is missing.
- G) Coat any exposed steel with AmerShield, overlapping remaining factory paint.

### How do I test / maintain the mechanical float system?

- A) Follow steps A-D above.
- B) Remove all mechanical float trip components.  
When removing the float arm actuator - USE CAUTION! the sleeve that holds the float arm in place may be weak or corroded. If it breaks, contact the factory for a Retrofit Float Arm assembly.
- C) Clean the float cup reservoir interiors and replace all float trip components.
- D) Re-connect the float trip chain to the trip arm on the shear valve.
- E) Slowly add water to each cup until it trips the shear valve.
- F) If the water does not trip the float, check to see if it is binding. Pull up by the stem to determine if it is stuck or cannot rise smoothly. Adjust components as necessary.
- G) If it can freely move vertically but water does not trip it or rises above the top, contact the factory to order a replacement. NOTE: Only round floats are available.

## FOR MORE FAQ



**SCAN CODE**  
[S BRAVO.COM/FAQ](http://S BRAVO.COM/FAQ)

### LIMITED WARRANTY

All containment systems sold by S. Bravo Systems, Inc. are warranted to be free from defects in material and workmanship for a period of one year from date of purchase. This warranty will be limited to the repair and replacement of Bravo parts only and will exclude all claims for labor or consequential damage. No other express warranties given and no affirmation of S. Bravo Systems, Inc., or its agents and/or representatives, by words or action, will constitute a warranty. IT IS EXPRESSLY AGREED THAT THIS WARRANTY WILL BE IN LIEU OF ALL WARRANTIES OF FITNESS AND IN LIEU OF THE WARRANTY OF MERCHANTABILITY.

This warranty is void if there is any evidence of modification, abuse, negligence, or improper installation. If any fittings or components, other than S. Bravo Systems approved fittings or components, are used in conjunction with any S. Bravo Systems product, the warranty pertaining to these products is immediately void.