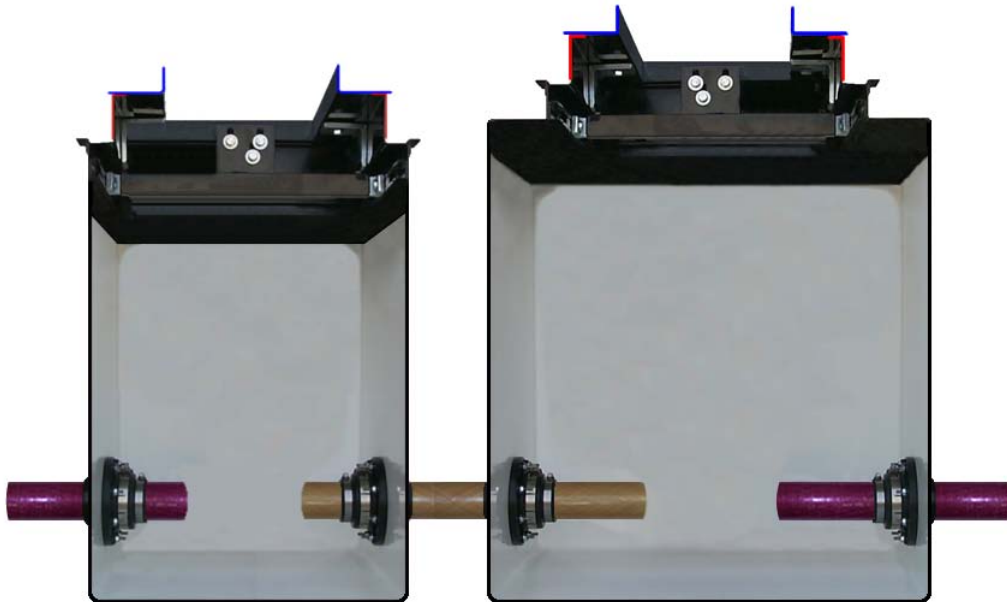
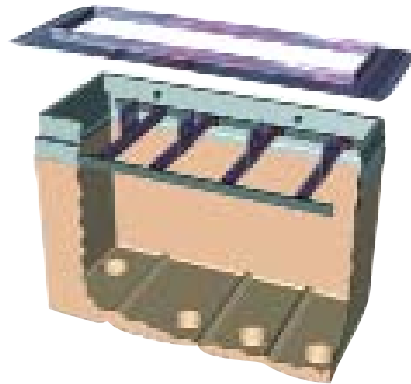


INSTALLATION INSTRUCTIONS

B4000, B4000-B, B8000, B8000-B, B9000

BRAVO DEEP DISPENSER CONTAINMENT SERIES INSTALLATION INSTRUCTIONS



REQUIRED TOOLS

(NOT PROVIDED)

Power/air Sanders. Acetone to clean up tools/applicators. Power Cutting Tools.

RECOMMENDED

T-F-33-SAND-KIT

5/8" sanding disc backs and centralizers for all Bravo Systems Fittings



S. Bravo Systems, Inc.
2929 Vail Ave. - Commerce, CA 90040
(323) 888-4133 - FAX: (323) 888-4123
www.SBravo.com



ii-4K-8k-9k-SW-07A

MANDATORY

The B8000/9000 SingleWall UDC Sump Series from S. Bravo Systems, Inc. **MUST** be installed by, and only by, **Bravo Certified Installation Contractors**.

Details can be found at www.sbravo.com/cert.htm

IMPORTANT

READ THESE INSTRUCTIONS - KEEP FOR FUTURE REFERENCE

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F) Float Trip System Maintenance.....	p. 7

NOTICE

- Closely adhere to all directions and warnings indicated on the product or contained in these instructions.

- Warranty is void if there is any evidence of modification, abuse, negligence or improper installation.

- For assistance please call Bravo for technical support at (800) 28-BRAVO. Outside the U.S.A. please call (323) 888-4133.

SAFETY FIRST! S. Bravo Systems, Inc. urges you to carefully adhere to the normal safety procedures and precautions followed by your company. Please follow the mandates and compliances decreed by OSHA, local, State and federal regulations regarding the use of this product.

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.

NEW INSTALLATION

IMPORTANT

During Installation, cover the UniBox with cardboard, plastic sheeting or equivalent to keep debris from falling into the box. Cover all threaded connections to prevent damage to threads.

A - Sump Positioning

A.1- Determine the permanent position of the UniBox inside the island according to your specs. Place two support bars across the island widthwise. (Fig. A.1)

A.2- Rest UniBox on top of a bed of peagravel and ensure the UniBox is level. The Angled supports should make contact with the support bars of the island (Fig. A.1).

NOTICE Containment boxes are marked "A" for Junction box side. Refer to dispenser manufacturers Junction box position.

IMPORTANT Box should be approximately 1/4" above top edge of island to allow water to drain away from containment box.

A.3 - After positioning dispenser box, secure with tie wire to the island support to prevent shifting during concrete pour. Bolting angled supports to the support bars TO THE TOP OF THE METAL MIDFRAME through provided 1/4" holes is recommended. (Fig. A.4)

PRODUCT AND VAPOR SHEAR VALVE

A.4 - Remove top frame. If not factory installed, connect either the flex connector and/or riser pipe to the bottom of the shear valves outside the sump, then install all product and vapor shear valve assemblies according to the dispenser configuration to the provided brackets. If adjustments to the position of the shear valves are required, check with dispenser manufacturer's configuration (Fig. A.4). See also "Section D" on page 8.

PENETRATION FITTINGS

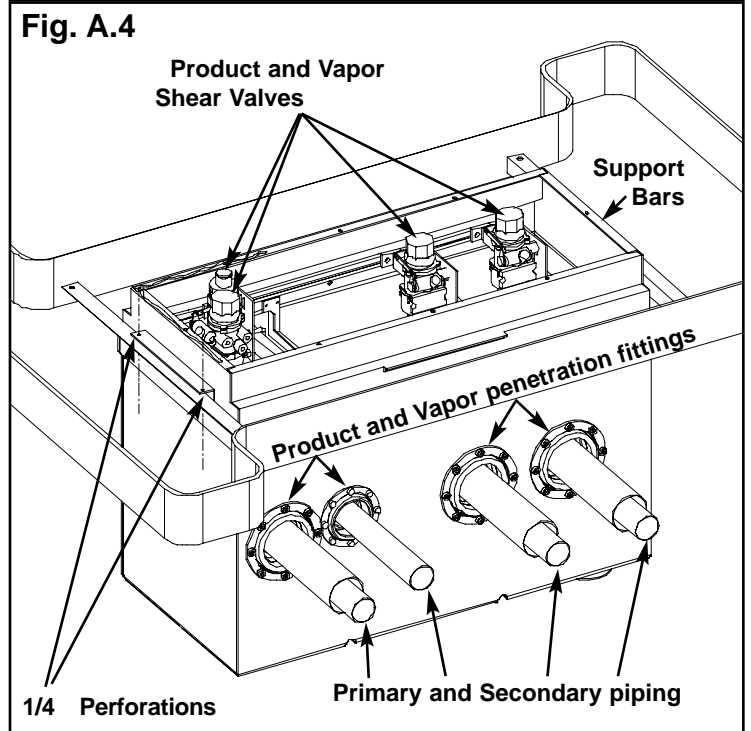
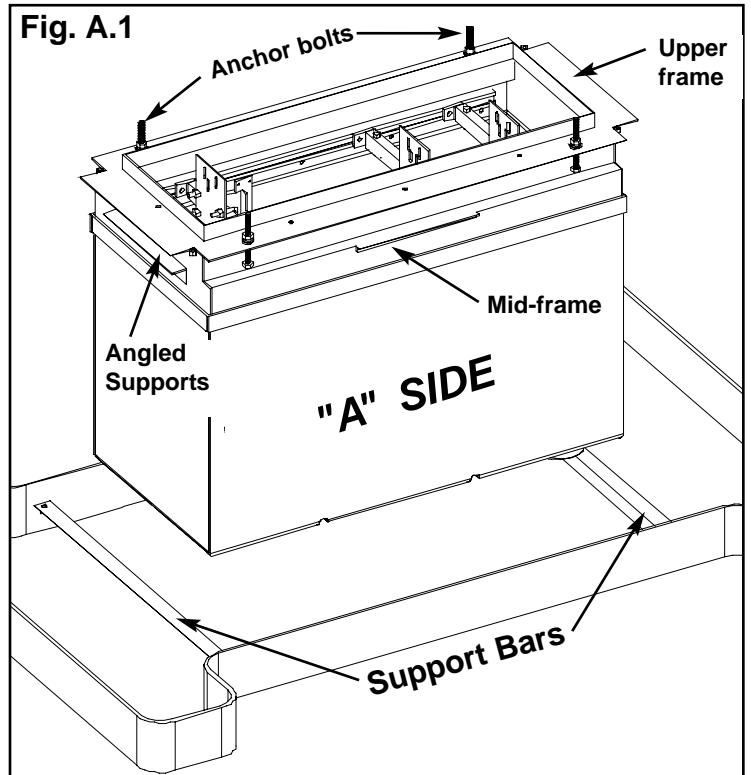
A.5 - Install the required number of penetration fittings per their respective Installation Instructions (Fig. A.4).

IMPORTANT

IT IS RECOMMENDED THAT YOU ABRASE THE SUMP WALLS FLAT PER THE T-F-33-SAND-KIT INSTRUCTIONS

ELECTRICAL PENETRATION FITTINGS

A.6 - Install the required number of electrical penetration fittings. Please refer to your penetration fitting manufacturers' Installation Instructions.



WARNING Pressure test the primary line following the pipe manufacturer's Installation Instructions. When provided, **maximum test pressure for shear valve assembly is 75 psig.** Refer to shear valve manufacturer's Installation Instructions for details on testing.

PRIMARY AND VAPOR PIPING

A.7 - Please refer to your pipe manufacturer's Installation Instructions to install primary and/or vapor pipe at this time. Pay special attention to the **FITTING MANUFACTURERS INSTALLATION INSTRUCTIONS!** Save yourself time by following them closely.

B - WATER TESTING SUMP / FITTINGS

IMPORTANT

It is recommended that all piping and conduits be connected at this time. Clear all debris & materials from the dispenser sump and float reservoir (If your sump is equipped with the float-trip system) All field installed penetration fittings must be water-leak tested.

B.1- To test field installed fittings, add enough backfill under the UDC box so its weight is completely supported. Do not allow island supports to hold all the weight. The box will become extremely heavy.

B.2- Fill the box with water to **2 inches** above the highest fitting. **After 3 hours**, make a visual inspection of the exterior of the box. If there are no leaks, proceed to remove the water with an appropriate pump. **DO NOT DRILL A DRAIN HOLE**, and plan to patch the hole.

If there **ARE** leaks, proceed to **Step C** (below) for repair instructions.

C - IF ANY LEAKS ARE FOUND!!

A: Locate leak point(s) and mark with marker so you can locate it / monitor it.

B: Repair or reinstall penetration fittings according to your penetration fitting manufacturers' Installation / Maintenance Instructions.

C: Occasionally... Bravo Fiberglass Series Products may suffer mild damage in transit or field installation. Please take a close look at edges and corners.

D: FOR FIBERGLASS REPAIRS: Abrade a 2" diameter area centered on the leak point until flow coat is gone and natural resin/fiberglass material can be seen. Dust with shop brush or compressed air and do not use shop towels or acetone. S. Bravo Systems recommends "**Smith Fibercast Adhesive Kit #8014**" to repair and reinforce Bravo Fiberglass products. Make sure area is completely dry and apply resin generously. For anything larger than pinhole leaks you must consult the factory.

FOR PENETRATION FITTING LEAKS/REPAIRS: Follow penetration fitting manufacturers repair recommendations in their respective Installation Instructions. **DO NOT** compromise Bravo Product Integrity.

E: Let cure for a minimum of 4 hours @ or above 75° Fahrenheit.

D-Upper Frame Installation

D.1 - Clean both the UniBox and the top frame surfaces. Apply a generous bead of provided Vulkem to the top edge of the Midframe. Be sure to pool a little Vulkem on top of the bolt holes. **(Fig. D.1)**

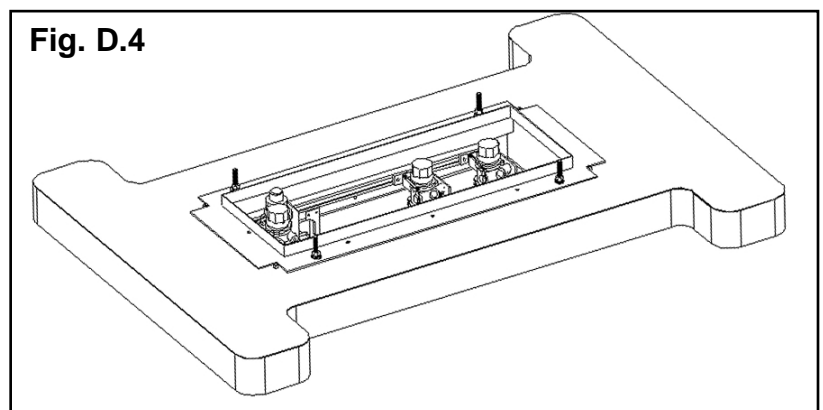
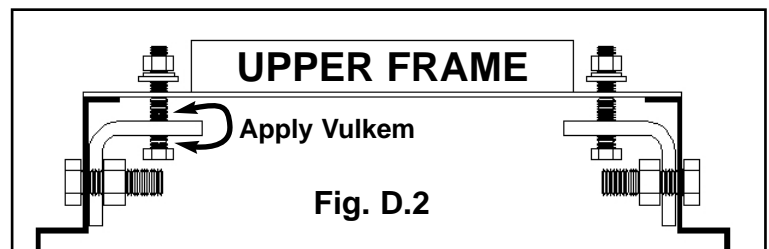
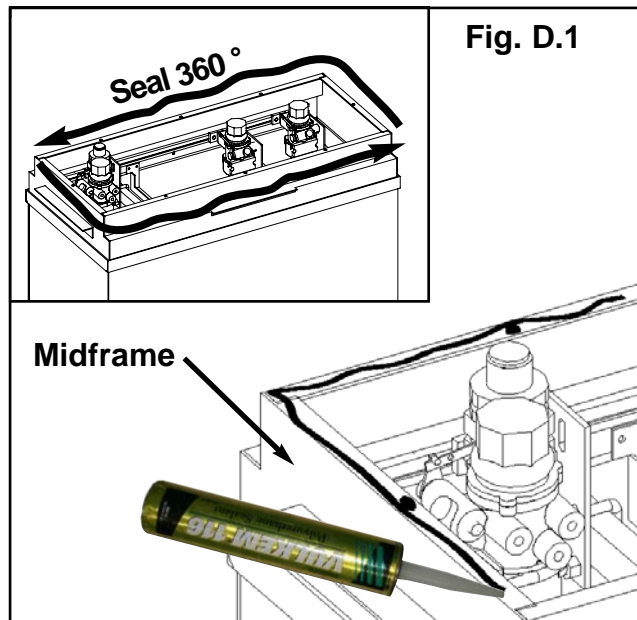
D.2 - Lay the UniBox Upper frame on top of the midframe and align holes **(Fig. D.2)**. Secure using provided truss head screws. Apply Vulkem to threads and between parts you are bolting to.

Apply Vulkem to the external gap between the midframe and upper frame.

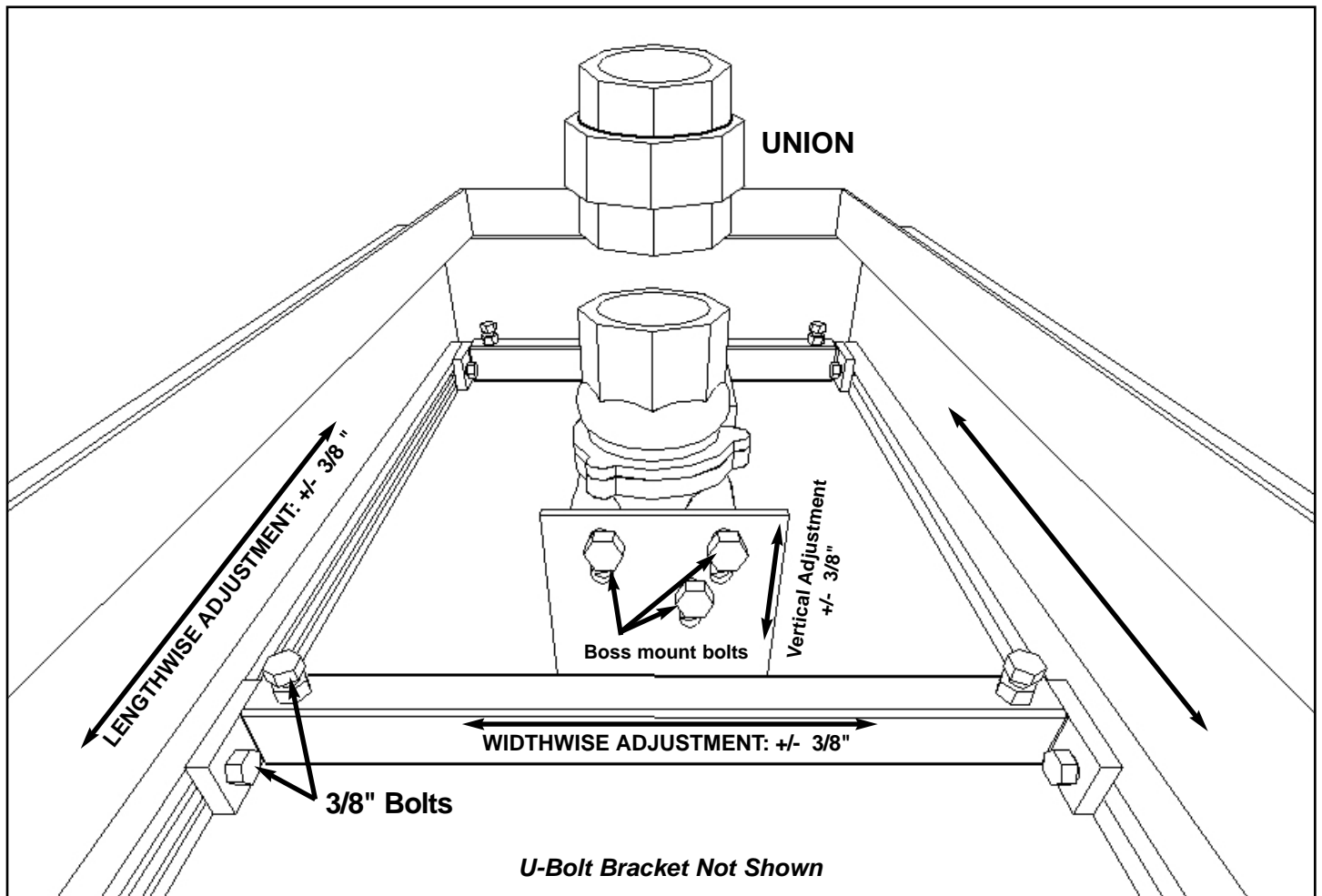
After tightening bolts and/or nuts provided and upper frame is secure, apply generous amount of vulkem to seal the nut and threads.

D.3 - Loosen valve bolts on bracket to allow for adjustability for when you align dispenser and make valve connections.

D.4 - At this time pour **ONLY** the Island concrete **(Fig. D.4)**. **Do not** pour the driveway slab. This will allow access for final connections to dispenser.



E - ADJUSTING THE PRODUCT SHEAR VALVE



E.1 - When the dispenser is anchored properly, the dispenser inlet or pump inlet should be plumb with the product shear valve. If the product shear valves are positioned correctly, connect them with a union.

E.2 - If the valve and inlet are not aligned, determine the distance necessary for the valve to be moved. To adjust the valve lengthwise and/or widthwise, loosen the 3/8" bolts on the bracket ends and on the bracket inserts. Align valve to dispenser inlet and retighten bolts.

E.3 - Connect dispenser riser pipe to the product shear valve. A nipple may be required to extend the dispenser riser. If product shear valves are positioned correctly, connect them with a union.

IMPORTANT For rigid piping apply a UL classified pipe sealant for use and handling of gasoline and petroleum oils to externally threaded connections.

E.4 - Now retighten bolts and/or nuts attaching the shear valves to the bracket. Use provided washers.

E.5 - Connect electrical and vapor lines to the dispenser as required by local regulations. Always follow electrical and vapor component manufacturers' Installation Instructions.

FLOAT TRIP SYSTEM MAINTENANCE INSTRUCTIONS

For Models B4000 & B8000 Under Dispenser Containment

CAUTION

- If the containment box is not performing normally when the operating instructions are followed, contact qualified service personnel or Bravo's customer service at (800) 282-7286. Outside U.S.A., call (323) 888-4133. Do not attempt to service or repair the containment box yourself.

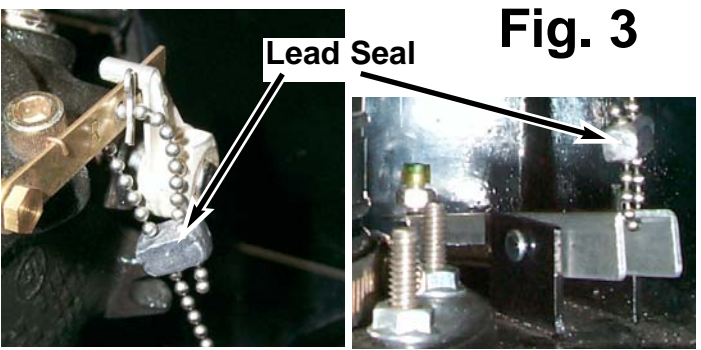
- Prior to any maintenance, verify that the containment box interior is clean and free of debris and obstructions, especially in the float reservoir(s) area.

- Make sure that the containment box is not submersed in fuel, water or any other fluids.

- Do not tamper with or modify the float device or the shut-off system. This includes the lead seals and float chain. Any tampering with these components transfers the liability for the shut-off system function to the person or persons who tamper with the above components.

- The interior of the containment box must not be directly exposed to rock, salt, ice or snow.

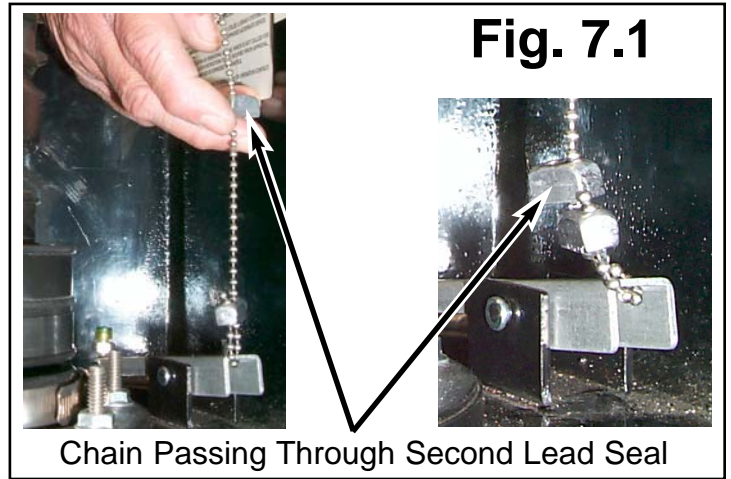
ROUTINE FILTER CHANGES



CAUTION prior to filter changes, follow dispenser manufacturer's instructions.

1. Check the float chain tension for proper adjustment. Make sure it is connected to the shear valve and the float arm.
2. Next test the float system by gently raising the float tubing approximately 1/4" to 1/2" with the valve in the open position. This action should close the shear valve. If it does not, refer to Adjusting the Float Mechanism section.
3. Examine the lead seals on the float chain at the float arm pivot and at the product shear valve (Fig. 3). If the seals were not altered, continue with the next step. If the seals were altered, refer to "Adjusting the Float Mechanism."
4. While removing the filter, collect as much fuel as possible from the filter before it enters the containment box. Use the manufacturer's supplied cup/collector to minimize fuel loss.
5. Next remove all fluids from the containment box. Bravo's manual siphon pump is designed to connect to the top of the float tubing for easy fluid removal. **DO NOT** leave absorbent materials in the containment box to soak up fluids.
6. Properly dispose of removed fluids according to local, state and federal regulatory guidelines.

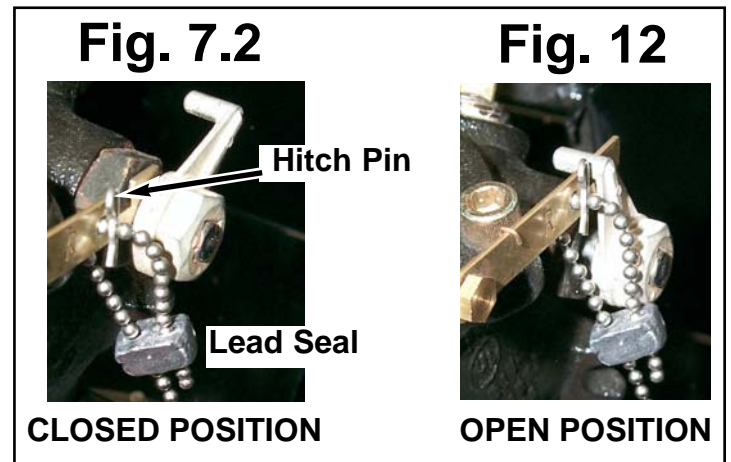
ADJUSTING FLOAT MECHANISM



7. Using hitch pin secure chain tension with the shear valve in **OPEN** position, no slack in chain (Fig. 7.1, 7.2).
8. If a fluid test was performed, drain the float reservoir through the float tubing by using the Bravo siphon pump.
9. Properly dispose of removed fluids according to regulatory guidelines.
10. Lift the tubing 1/8 to 1/4" till the float trip closes the valve. If the float trips the valve correctly, proceed to Step 6, Setting Float. Adjust float chain tension by raising or lowering nut on float tubing.
11. Raising the nut increases tension and lowering nut loosens tension of float chain. (Fig. 11)

SETTING FLOAT MECHANISM

12. (Dispenser riser must be connected to shear valve **before setting**) Slide up the double seal and feed the free end of ball chain, 3/4" below brass arm (Fig. 7.1, 7.2). Then crimp lead seal to set chain, remove hitch pin and reset the valve to **OPEN** Position. (Fig. 12)



S. Bravo Systems, Inc. Limited Warranty

S. Bravo Systems, Inc. ("Bravo") warrants to the original purchaser (the "Original Owner") that all containment systems sold by Bravo to Original Owner (the "Product"), when properly installed by a Bravo certified installer (the "Installer"), and maintained in strict compliance with Bravo's published instruction guidelines, shall be free from defects in material and workmanship for a period of one (1) year from the date of purchase (the "Warranty Period"). In the event of defect in material and/or workmanship of the Product during the Warranty Period, this warranty shall be limited to the repair and/or replacement, which shall be determined in Bravo's absolute and sole discretion, of the Product only and shall exclude all claims for labor or consequential damage in connection with such corrective measures.

This limited warranty shall not be applicable if installation, and replacement installation if needed, of the Product is performed by any installer other than a certified installer, in writing, by Bravo, or the Product is used in conjunction with any fittings or components not previously approved, in writing, by Bravo.

This limited warranty shall not be applicable to any defects in material and/or workmanship of the Product caused by (1) the intentional or negligent acts of the Original Owner, the Installer, or by any third party including, but not limited to, any modification and/or abuse of the Product, improper installation of the Product, failure to comply with Bravo's maintenance or installation guidelines for the Product, or (2) any condition not within Bravo's control including, but not limited to, any Act of God, fire, natural events, disasters, calamities, or occurrence.

If any fittings or components other than Bravo approved fittings or components are used in conjunction with any Bravo product, the warranty pertaining to these products is immediately void.

This limited warranty may not be modified without Bravo's prior written approval. If any provision of this limited warranty is held invalid or unenforceable, in whole or in part, the remaining portions of this limited warranty shall be severable and remain in effect.

No agent, independent contractor, employee, or representative of Bravo, including any certified Installer (collectively, "Bravo Representative"), has any authority to bind Bravo to any affirmation, representation, guarantee or warranty concerning the products sold under this limited warranty, and unless an affirmation, representation, guarantee, or warranty made by a Bravo Representative is specifically included within this limited warranty, it will not be enforceable by the Original Owner.

This limited warranty is made and entered into in the State of California, and shall in all respects be interpreted, enforced and governed under the law of said state. This limited warranty shall supersede all prior communications, either written or oral, and all previous agreements, if any, between the parties with respect to any subject matter hereof, and shall set forth the complete understanding of the parties with respect thereto.

IT IS EXPRESSLY AGREED THAT THIS LIMITED WARRANTY WILL BE IN LIEU OF ALL WARRANTIES WHETHER WRITTEN, ORAL, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER OBLIGATIONS AND LIABILITIES ON THE PART OF BRAVO. The foregoing shall constitute Bravo's sole liability to the Original Owner and under no circumstances shall Bravo be responsible for any special, incidental, or consequential damages.