

A1005-505CEBG

Stainless Steel Spill Containment Replacement for EBW 705 Below Grade

INSTALLATION INSTRUCTIONS

US Patents 8,425,145 B2 and 8,425,145 B

Emco Supplied Parts

Stainless steel bucket

- (2) O-rings
- (3) split flanges
- (9) stainless steel bolts
- (9) washers
- (1) eccentric ring
- Lid w/seal

Required Kits

If existing bucket has a drain...
A1005-505DPEB Drain Plug Kit

Required Tools

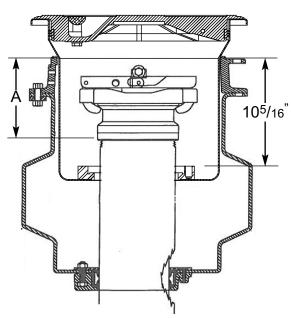
3/16" Allen wrench
9/16" socket
1/2" socket
12" extension and ratchet
Chain wrench or strap wrench
Pipe sealant
Urethane sealant
(such as Emco Z0839-001)
Adapter wrench
Wire brush
Plumbers putty or heavy grease

Purchased Separately from Emco

Emco 494833 Test Cover Emco A1004-210TEST Refer to your local regulations and AHJ before installation of this product

<u>Step 1:</u> Remove grade level lid. Open inner lid and measure Dimension A from inside the rim (see drawing below) to the top of the existing nipple. <u>This dimension must be greater than 4 3/4" (if using a vapor swivel adapter) or 4 1/4" (if using a fill swivel adapter).</u> Note that the typical swivel adapter will not work in the EBW 705 Below Grade bucket with nipple provided if installed shallow due to lack of clearance. A low profile cap and adapter is usually needed to provide clearance.

Step 2: Measure from the rim down 10 5/16" inches. At this dimension, you must have a clean pipe surface on the nipple. You can not have threads in this area. This is where the o-ring will seal, and the o-ring will not seal on pipe threads. If you do not have a clean, undamaged, and unthreaded pipe nipple surface at this dimension (10 5/16"), remove nipple and install the appropriate length nipple.





<u>Step 3:</u> Remove the two bolts on the back of the inner lid and remove the lid.



<u>Step 4:</u> Remove or flatten the drain chain bracket.







Step 5: Using a 3/16" Allen wrench, remove the drain, if existing. Take care when removing bolts as there is Loc-tite on the threads, and the hex on the bolt heads may be subject to stripping. Carefully inspect the drain cavity to ensure there is no damage that could cause the bucket to fail testing requirements. Plug the drain cavity using Emco A1005-505DPEB Drain Plug Kit. Install the gasket, then the stainless steel plate. Use a 1/2" socket to secure in place with new bolts, provided.



<u>Step 6:</u> Test fit the new stainless steel bucket to ensure that it sits down aganist the existing bucket rim, then remove the stainless steel bucket.



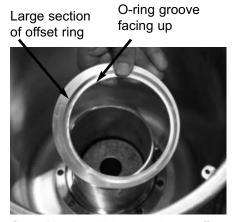
<u>Step 7:</u> Thoroughly clean the existing rim surface with a wire brush, then with a solvent such as lacquer thinner to ensure there is no oily residue on the rim. A bead of urethane sealant, placed on the existing rim, may be used to prevent groundwater from entering the existing containment.



<u>Step 8:</u> Install the new stainless steel bucket over the nipple, pushing it down completely to ensure that it seats fully aganist the existing rim. Note: The upper lip of the bucket will not rest on the existing rim.



Step 9: Install the small cross section o-ring in the groove of the lower flange. Make certain o-ring groove is clean and free of debris.



Step 10: Install the aluminum offset ring, with o-ring groove facing up. Align the large section of the ring with largest open area around the nipple as shown.







Step 11: Install the large cross section o-ring.



<u>Step 12:</u> Install the three flanges using the nine supplied stainless steel bolts. Ensure that the flanges are tight against the nipple.



Step 13: Hand tighten all nine bolts, ensuring that the bucket is completely down and flat on the rim.



Step 14: Using a 9/16" socket, tighten each of the ten bolts to 15 ft. lbs. Pressure may need to be applied to ensure the liner does not shift while tightening bolts.



<u>Step 15:</u> Install adapter and cap per instructions included with each.

Step 16: Testing - Perform one of the following test procedures as specified by customer:
 Integrity Test - perform per following procedure, with customer specified cap and adapter.
 Hydrostatic Test - perform if specified per customer or local regulations. Perform per local guidelines.



Integrity Test Procedure

Equipment (not supplied)
Emco A1004-210TEST Vacuum Apparatus w/test adapter 494343
Emco 494833 Test Cover
Timer
Air supply

Procedure

- Line top surface of stainless steel bucket with plumbers putty.
 (Heavy grease may be used, but may not work properly on rough surfaces.)
- 2. Place test cover over plumbers putty or heavy grease.
- 3. Insert brass plug from test unit into opening in test cover (A).
- 4. Attach air pressure source to air pressure regulator on vacuum apparatus.
- 5. Slowly apply vacuum of 30" water column (2.2" mercury) to the interstitial space, by moving the toggle switch. Wait 30 seconds. Reapply 30" water column.
- 6. Ensure switch is in off (center) position, start timer and record remaining vacuum after 1 minute.
- 7. If the remaining vacuum after 1 minute is 26" water column (1.9" mercury) or greater, the containment is tight.
- If the test fails, determine if leak point is at test cover seal, cap or adapter, or base flange o-ring by spraying a soap solution to each area and watching for bubbles. Repair as required and retest.
- 9. Replace components.





Follow-Up Testing

If follow-up or annual retesting is required by local/state regulation, use the above procedure.

Tank Operator Responsibilities

Tank operator must ensure that all Federal, Provincial and local codes are being met during the filling of the tank. All operators must be familiar with proper filling procedures.

The operator responsible for transferring product to an above ground storage tank must take all reasonable steps to prevent spillage. The delivery hose from the tank's fill pipe must not be disconnected before the hose has been drained completely.

When tank vehicles are being unloaded, the vehicle operators must remain

- (a) in constant view of the transfer nozzle and fill pipe; and
- (b) in constant attendance at the discharge control valve.