



# A1005-505CEW3 Series A1005-505CNG Stainless Steel Spill Containment

## INSTALLATION INSTRUCTIONS

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

### Emco Supplied Parts

Support Ring  
Stainless steel bucket  
(3) mounting brackets  
(3) 1/4"x1/2" bolts  
(3) 1/4" washers  
(2) O-rings  
(3) split flanges  
(9) stainless steel bolts  
(9) 3/8" washers  
Offset ring  
Lid w/seal

### A1005-505CEW3DR

Hose  
Hose fitting  
Drain cap  
Elbow

### Required Tools

7/16" wrench  
9/16" socket  
12" extension and ratchet  
Chain wrench or strap wrench  
Pipe sealant  
Adapter wrench  
Wire brush  
Plumbers putty or heavy grease

### A1005-505CEW3DR

11/16" wrench  
3/4" ratchet extension  
9/16" wrench

### Purchased Separately from Emco

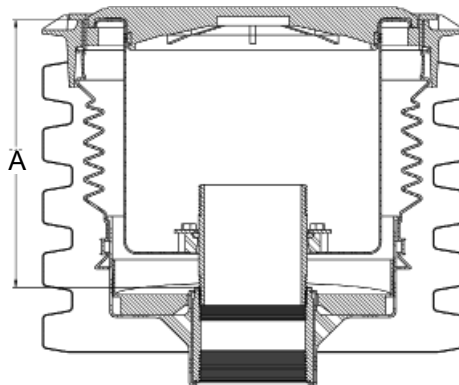
Emco 494833 Test Cover  
Emco A1004-210TEST

Refer to your local regulations and AHJ before installation of this product

**Step 1:** Measure from the top of the rim to the bottom of existing bucket, **Dimension A**. This dimension must be greater than 11" (12" for models with a drain) for the Emco stainless steel liner to work. A low profile adapter and cap must be used.

**Step 2:** Remove lid. Remove drain, if existing.

**Step 3:** Measure from the Drain Channel down 8 7/8". 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 (8 7/8") then a new clean and undamaged nipple will be required. The proper nipple can be selected from the table below.

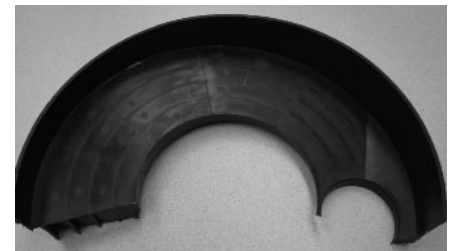
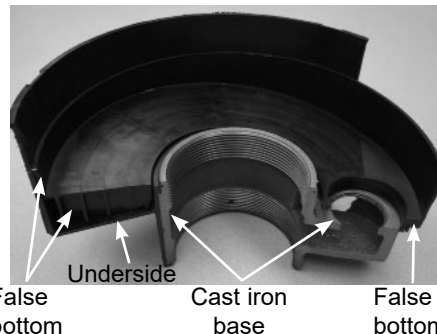


**Step 4:** Use a 7/16" wrench to remove the band clamp. Discard.

### Pipe Nipple Selection Chart

#### Dim. A

11"-12"	Emco A7901-005
12"-13"	Emco A7901-006
13"-14"	Emco A7901-007



Cutaway of the false bottom, removed

**Step 5:** For models with drain only: Using a chisel (or similar tool), break the false bottom into several pieces and remove from the manhole. **Use caution to not puncture the underside or break the cast iron base.**

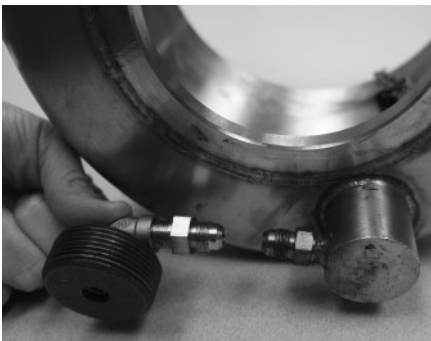


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**Step 6:** Using a utility knife, cut all around the top of the bellows to remove the bellows and expose the bottom of the rim.

*For models without drain, proceed to step 7; with drain (DR models), proceed to step 8.*



**Step 9:** Thread hose fitting into elbow.

**Note:** Make certain that the female threads on the elbow are facing toward the hose fitting mounted on the bottom of the stainless steel bucket as shown.



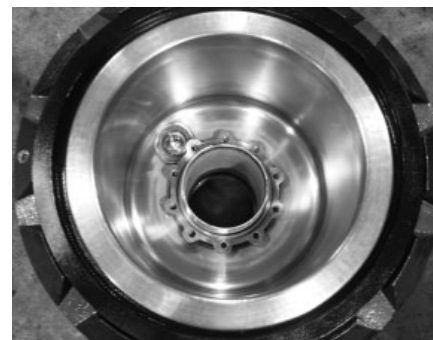
**Step 12:** Securely tighten the bolts using a 7/16" wrench.



**Step 7:** Apply sealant to threads of drain plug and install in drain cavity. Proceed to step 10.



**Step 10:** Install pipe nipple, if required, from step 3.  
**If installing an A1005-505CNG, proceed to Step 13.**



**Step 13:** Test fit bucket: place bucket over the riser pipe, and set onto support ring. Place lid onto bucket and make certain that the lid will go into recess in support ring. Remove bucket.

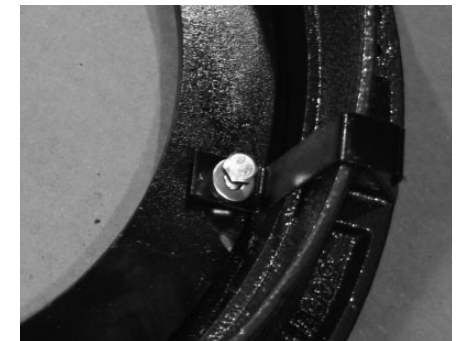
*For models with drain, proceed to step 14; without drain, proceed to step 15.*



Hose Fitting  
Street Elbow

Drain Cap

**Step 8:** Apply pipe sealant to threads of drain cap. Thread drain cap into spill containment drain cavity using a 3/4" ratchet extension. Install street elbow into drain cap.



**Step 11:** 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. Attach the support ring (provided) to the rim using the 3 mounting brackets, bolts and washers (all provided).

**Note:** This view shows the underside of the rim.



**Step 14:** Attach the hose to drain adapter and fitting in bottom of existing bucket. Hand tighten. Then, using an 11/16" wrench, turn 1/4 additional turn. **Do not overtighten.**



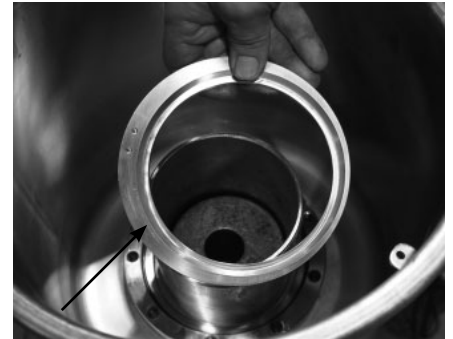
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**Step 15:** Install bucket over riser pipe and onto support ring. For drain equipped models, make certain that the drain hose is not kinked, or the drain will not operate properly.



**Step 16:** Install small cross section o-ring in bottom of flange.



**Step 17:** Install offset ring into bottom flange, aligning large section of flange with largest open area around the nipple. Center the bucket in support ring by rotating bucket.



**Step 18:** Install large cross section o-ring over the nipple, seating it completely in the groove in the offset ring.



**Step 19:** Install the three split flanges using the nine supplied stainless steel bolts and washers.



**Step 20:** Hand tighten all nine bolts, ensuring that the bucket is completely down and flat on the rim.



**Step 21:** Using a 9/16" socket, tighten each of the nine bolts to 15 ft. lbs. Pressure may need to be applied to ensure the liner does not shift while tightening bolts.



**Step 22:** Install adapter and cap per instructions included with each.

## **Step 23: 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.



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## Integrity Test Procedure

### **Equipment** (not supplied)

Emco A1004-210TEST Vacuum Apparatus w/test adapter 494343

Emco 494833 Test Cover

Timer

Air supply

### **Procedure**

1. Line top surface of stainless steel bucket with plumbers putty as shown.  
(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.
8. 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.

### **Emco Wheaton Retail**

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