

INSTALLATION INSTRUCTIONS

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

Emco Supplied Parts

Primary & secondary stainless steel buckets
Adapter plate
(4) O-rings
(6) Split flanges
(18) Stainless steel bolts and washers
(2) Offset rings
Lid w/seal
Primary rim
(8) 3/8" x 3/4" long bolts
Jack bolt kit
A0031-175 Riser extension
A0031-900 Riser extension

Required Tools

5/16" Allen Wrench
9/16" socket
3/8" socket
5/32" hex socket
12" extension and ratchet
Chain wrench or strap wrench
Emco A0081-001 Adapter wrench
Plumbers putty or heavy grease

Purchased Separately from Emco

Emco 494833 Test Cover
Emco A1004-210TEST

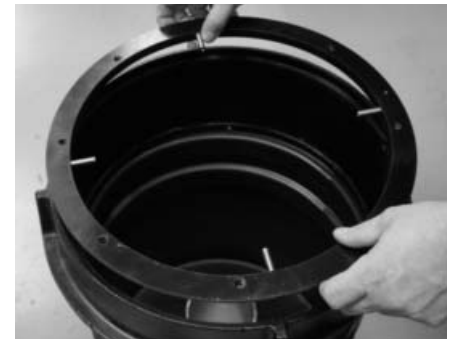


Step 2: Using a ratchet and a 1/2" socket, unthread the 4 bolts holding plow ring in place and remove the ring. Discard bolts and ring.

Step 1: Remove lid, cap, and adapter.



Step 3: Spray lubricant all around top outer edge of primary bucket to lubricate seal on outer wall of bucket. Using an Emco A0081-001 adapter wrench, remove the primary & secondary unit. Discard the unit.



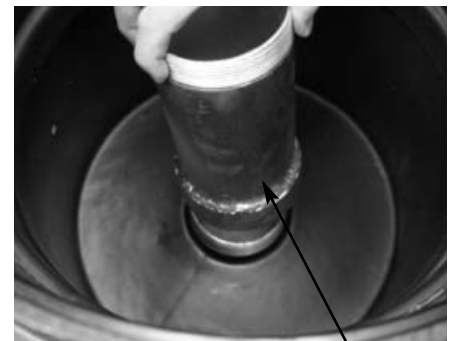
Step 4: Install the Emco adapter plate lining up the set screw holes with the holes in the Franklin rim.



Step 5: Using a ratchet and a 5/32" hex socket or allen wrench, thread the set screws fully in until they bottom out. Do not overtighten.



Step 6: If the original bucket was installed very deep, install Emco A0031-175 Riser Extension (included) before proceeding to Step 7. The riser extension may also be helpful when installing non-swivel adapters.



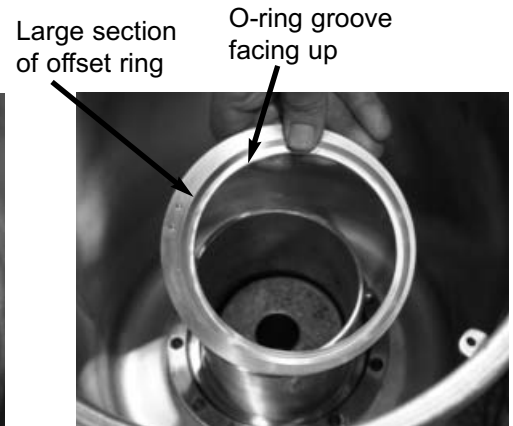
Step 7: Apply pipe dope to the female threads of the A0031-900 riser extension, and install, using a chain wrench either on the bottom coupling or the lower portion of the extension.



Step 8: Install the secondary stainless steel insert. Line up the holes with the tapped holes in the Emco adapter plate.



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 on top of the aluminum offset ring.



Step 12: Install the three flanges using the nine supplied stainless steel bolts and washers. 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 nine bolts to 15 ft. lbs. Pressure may need to be applied to ensure the liner does not shift while tightening bolts.



Step 15: Apply a light amount of oil to the o-ring around outside of the primary insert.

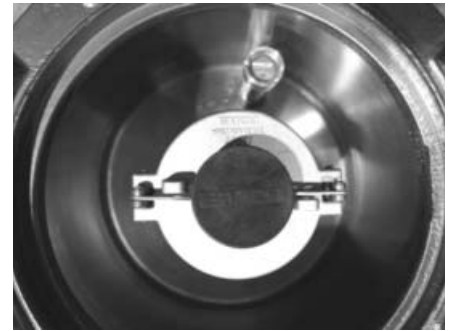


Step 16: Insert the primary stainless steel unit. Line up the holes with the secondary insert.



Step 17: Install primary rim using the (8) 3/8" x 3/4" bolts. Use a 3/8" socket to tighten to 20 ft. lbs. If necessary, use jack bolts to draw down rim, to get bolts started.

Step 18: Repeat steps 9 thru 14 to install the second o-ring/bolt/flange kit.



Step 19: Install adapter and cap per instructions included with each.

Step 20: Testing: Perform one of the following test procedures as specified by customer.

Integrity Test - perform per procedure on following page, with customer specified cap and adapter.

Hydrostatic Test - perform if specified per customer or local regulations. Perform per local guidelines.

Integrity Test

Equipment

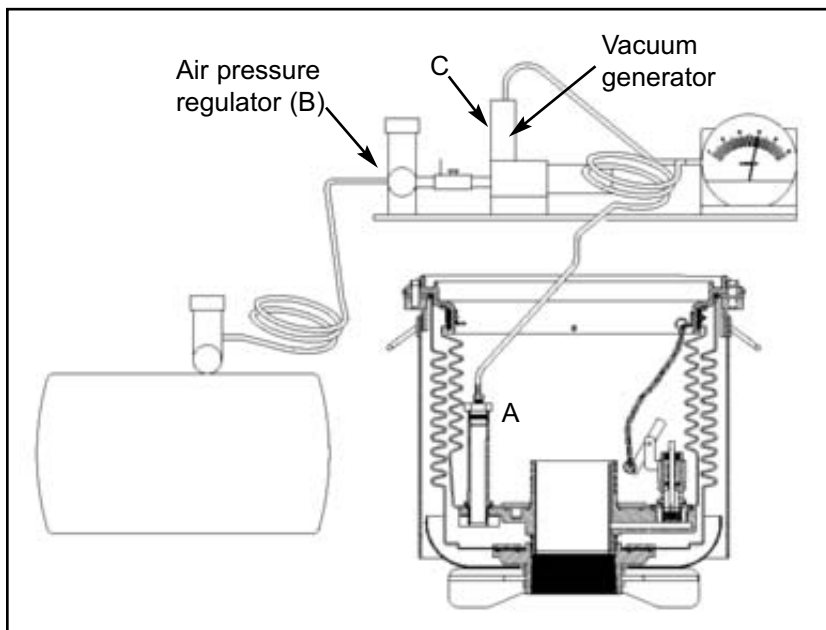
Vacuum apparatus w/test adapter 494343, available from Emco Wheaton Retail, p/n A1004-210TEST

Timer

Air supply, 30 psi

Procedure

1. Remove the gauge from the inspection port and install the test adapter p/n 494343 (included with the vacuum apparatus) (A).
2. Attach air pressure source to air pressure regulator (B) on vacuum apparatus.
3. Slowly apply vacuum of 30" water column (2.2" mercury) to the interstitial space, by moving the toggle switch (C). Wait 30 seconds. Reapply 30" water column.
4. Ensure switch is in off (center) position, start timer and record remaining vacuum after 1 minute.
5. If the remaining vacuum after 1 minute is 26" water column (1.9" mercury) or greater, both the primary and the secondary containment vessels are tight.
6. If the test fails, allow the bellows to equalize for one minute and repeat test, starting at step 3.
7. If test fails a second time, refer to Emco Wheaton Retail Test Procedures TP-160 and TP-161.
8. Replace components or repair as necessary.



Maintenance

1. Keep rim/lid and drain areas free of debris.
2. Replace any damaged part at once.

Replacement Items

494551	Drain Kit
494343	Test Adapter
494641	Dipstick
A1004-210TEST	Vacuum Test Apparatus
A1004-210GAGE	Interstitial Gauge
A1004-316CLID	Lid and Seal



494343 Test Adapter

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.