

## CARBON & STAINLESS STEEL DRUM CLOSING INSTRUCTIONS

### OPEN HEAD DRUM - BOLT RING CLOSURE

In compliance with DOT 49 CFR 178.2 (c), persons shipping Skolnik drums must comply with the following closure instructions. Failure to do so will invalidate the UN ratings of Skolnik drums. Use of components other than those supplied with the drum (except for identical replacement parts from Skolnik) will also invalidate the UN rating.

- Step 1:** Ensure the gasket is properly fitted in the cover groove. (Fig. 1 or 2)
- Step 2:** Position the cover onto drum curl (Fig. 3) being careful to properly seat gasket around curl.
- Step 3:** Place bolt closure ring onto drum. The lugs of the bolt ring should be positioned downward. Ensure the inner channel of the closure ring engages the periphery of the entire drum cover and drum curl (Fig 4). Apply downward pressure on the cover and use a rubber mallet to hammer ring to further engage the ring, cover and drum curl into the inner channel of the drum ring.
- Step 4:** Insert bolt through unthreaded lug. Screw bolt into locking nut, then into threaded lug. (Fig. 5)
- Step 5:** Begin tightening the bolt. Downward pressure on the cover will assist the closing process. It will be necessary to hammer the circumference of the bolt ring with a rubber mallet while torquing the bolt in order to further seat the cover onto the drum. Continue torquing and hammering the ring until the ends of the ring reach the maximum gap shown in the chart below. The ring ends should not touch and the ring must be in a fixed position. The lock nut must be tightened against the un-threaded lug. (Fig. 6)

Ring Gap Requirements	
Drum Size	Max. Gap
5 - 16 gal.	0.500" (12.70 mm)
20 - 110 gal.	0.125" (3.175 mm)
55 gal. Composite	0.850" (21.59 mm)

**Important: Please contact Skolnik Industries for further instructions if encountered with difficulties in meeting the above requirements. Do not ship the drum.**

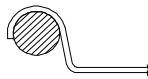


Figure 1

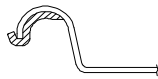


Figure 2

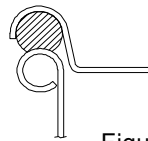


Figure 3

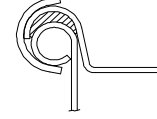
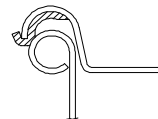


Figure 4

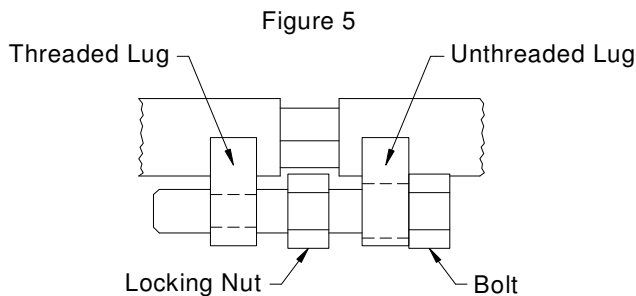


Figure 5

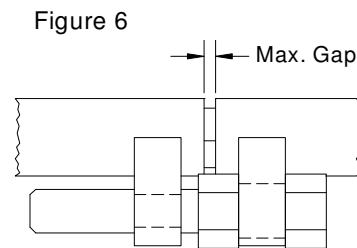


Figure 6

### OPEN AND CLOSED HEAD DRUMS WITH FITTINGS

- STEP 1** Check plugs for proper gasket seating.
- STEP 2** Screw plug into flange ensuring no cross threading.
- STEP 3** For Tri-Sure plugs with Buna gaskets, tighten 3/4" plug to 12 ft-lbs and 2" plug to 20 ft-lbs.  
For Tri-Sure plugs with Poly or Teflon gaskets, tighten 3/4" plug to 20 ft-lbs and 2" plug to 30 ft-lbs.  
For plastic Rieke plugs, tighten 3/4" plug to 9 ft-lbs and 2" plug to 20 ft-lbs.  
For steel Rieke plugs with Poly gaskets, tighten 3/4" plug to 20 ft-lbs and 2" plug to 40 ft-lbs.  
For steel Rieke plugs with all other gaskets, tighten 3/4" plug to 15 ft-lbs and 2" plug to 30 ft-lbs.  
For 3/4" Nuc-Fil Filters, tighten to 10 - 15 ft-lbs (per Nuc-Fil instructions).

**NOTE** Skolnik Industries can supply torque wrenches for plugs.

### NOTES

- Under the applicable DOT regulations, any changes made to the method of closure or closure components constitutes a change in the design type of this packaging, and invalidates the embossed certification.
- After filling and prior to transport, the shipper should check the tightness of closures to determine if the effects of heating, cooling or gasket relaxation have resulted in the need to tighten the closure.
- Drums (other than the composites) are tested at room temperature.

Please contact Skolnik Industries with questions regarding this information.

Revised August 04, 2004 by Skolnik Industries

## CARBON & STAINLESS STEEL DRUM CLOSING INSTRUCTIONS

### UN CERTIFIED CONTAINER WITH LEVERLOCK

#### OPEN HEAD DRUM - LEVERLOCK CLOSURE

- STEP 1 Ensure that the gasket is properly fitted into the cover groove.
- STEP 2 Position cover on to the drum curl being careful to ensure that the gasket sits around the bead.
- STEP 3 Fully open the Toggle Lever and place expanded ring on to the drum cover with the vertical-skirt hugging the drum body.
- STEP 4 Slowly and cautiously close the Toggle Lever so that the outer ring engages the cover / body juncture.
- STEP 5 Downward pressure along with tapping the outside of the ring may assist in an even closure.
- STEP 6 Once closed for shipment, engage latch to lock the lever into place.



Expanded ring being placed on Drum



Lever being closed slowly

#### OPEN AND CLOSED HEAD DRUMS WITH FITTINGS

- STEP 1 Check plugs for proper gasket seating.
- STEP 2 Screw plug into flange ensuring no cross threading.
- STEP 3 For Tri-Sure plugs with Buna gaskets, tighten 3/4" plug to 12 ft-lbs and 2" plug to 20 ft-lbs.  
For Tri-Sure plugs with Poly or Teflon gaskets, tighten 3/4" plug to 20 ft-lbs and 2" plug to 30 ft-lbs.  
For plastic Rieke plugs, tighten 3/4" plug to 9 ft-lbs and 2" plug to 20 ft-lbs.  
For steel Rieke plugs with Poly gaskets, tighten 3/4" plug to 20 ft-lbs and 2" plug to 40 ft-lbs.  
For steel Rieke plugs with all other gaskets, tighten 3/4" plug to 15 ft-lbs and 2" plug to 30 ft-lbs.  
For 3/4" Nuc-Fil Filters, tighten to 10 - 15 ft-lbs (per Nuc-Fil instructions).
- NOTE Skolnik Industries can supply torque wrenches for plugs

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