



OAHC Manway Gasket and Cover Installation



All work on industrial refrigeration systems and components shall be carried out only by qualified refrigeration personnel who have been trained and instructed in all work. The qualification and expert knowledge of the refrigeration personnel must correspond to all required state and local codes, standards, and regulations. People operating industrial refrigeration plants must understand the operating principles governing the entire refrigeration process. Provide adequate ventilation, and all required PPE prior to commencing any work

1. Safety and Pumping Down Separator

- a) Before isolating the separator, confirm all compressors discharging into the separator have been taken offline and proper measures have been followed to ensure they will not start.
- b) Isolate and evacuate oil separator of all ammonia. The separator must be equalized to atmospheric pressure before opening manway. Ensure all local ordinances are followed during the evacuation process and proper lockout-tagout procedures have been followed.

2. Removal of Manway Gasket and Cover

- a) Loosen the nut of the first retainer bracket (the assembly of yoke & bolt & nut) (do not remove the nut / bolt from the yoke).
- b) Remove the first retainer bracket from the cover.
- c) Hold and pull the handle of the cover to prevent it from falling before removing the second retainer bracket.
- d) Remove manway cover and gasket by pushing the cover to the inside of the vessel. Turn the cover and take it out through the manway.
- e) Inspect and clean the contact area of both the manway ring (inside the vessel) and the cover. Remove any residual gasket material and oil.

3. Installing New Gasket:

- a) Install a new gasket on manway cover (handle side) and insert cover into vessel, see figure 1
- b) Pull manway cover into place assuring gasket is evenly spaced around perimeter of manway opening and hold in place.
- c) Install the first retainer bracket (the assembly of yoke & bolt & nut) onto the cover and the manway ring. Bolt should make contact with the inside diameter of the slot, see figure 2.
- d) Adjust the position of the yoke, making sure it evenly contacts the manway ring (up and down).
- e) Using a wrench tighten the lock nut to hold the cover in place. Check that the gasket is evenly spaced around perimeter of manway opening.
- f) Repeat the same procedure above for the other retainer bracket.
- g) To torque, incrementally increase the torque in equal steps.
 - Step 1: 50 ft-lbs
 - Step 2: 100 ft-lbs
 - Step 3: 150 ft-lbs x 2 (repeat each bolt twice)
 - Step 4: Wait two hours to allow the gasket to seat. Re-torque to 150 ft-lbs



Figure 1 Manway Cover Showing Gasket Bitzer P/N P000014995



Figure 2: Bolt Location

4. Vessel should be leak checked before restarting operation.



5. Manway should not be torqued under pressure.

6. Spare Parts:

Description (OAH Series)	Gasket PN	QTY
Gasket (OAH0500, OAH0650, OAH0800)	P000014995	1
Gasket (OAH1000)	P000014996	1
Manway Locknut (all OAH series)*	P000011380	2

**If existing manway nuts are not the locknut style, it is recommended that the existing nuts be replaced by the locknut*