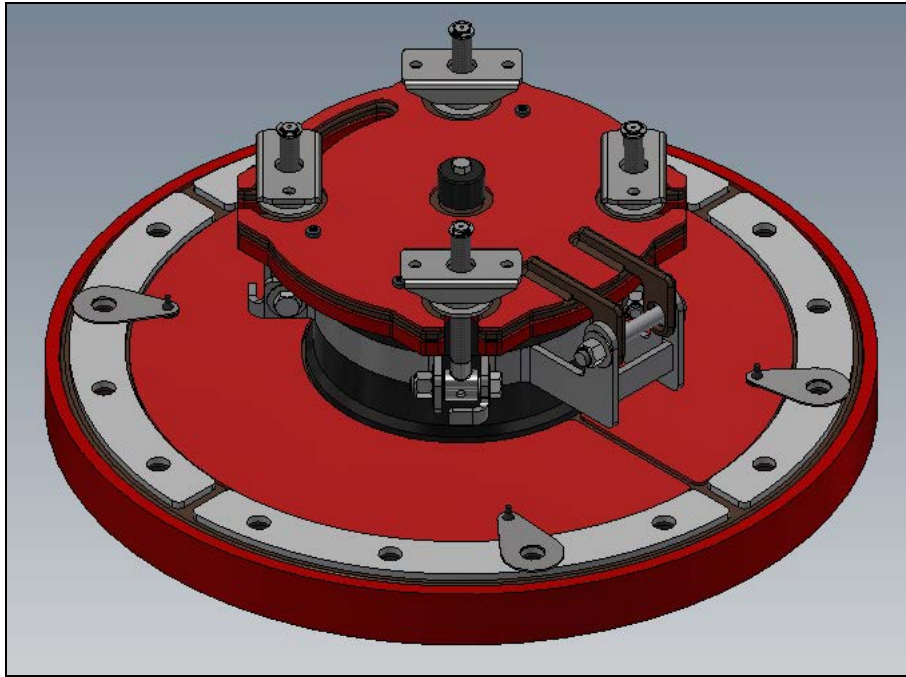


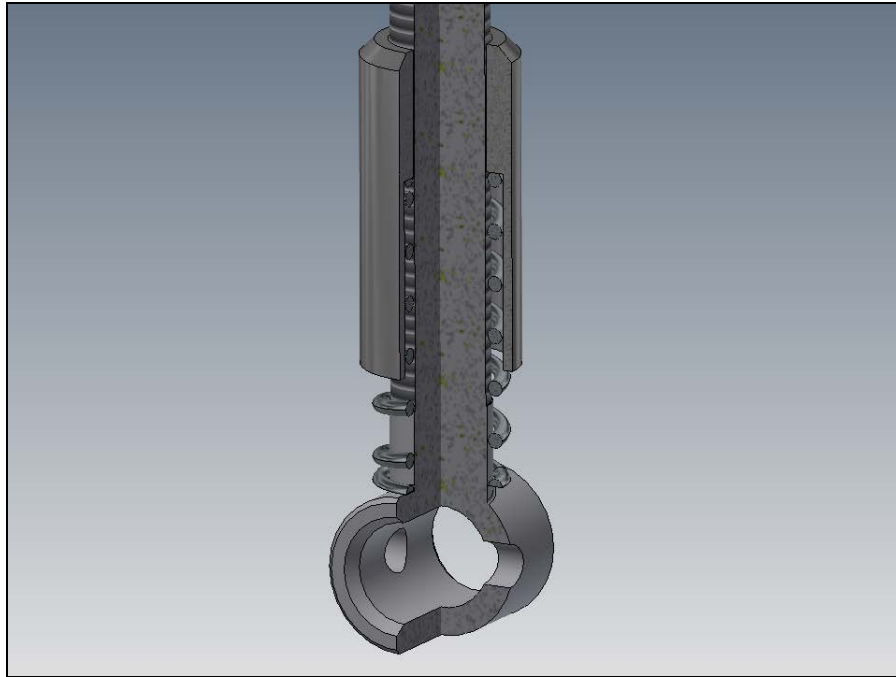


INSTALLATION INSTRUCTIONS FOR HSFPTTxxx TRUCK MANWAY PLATES

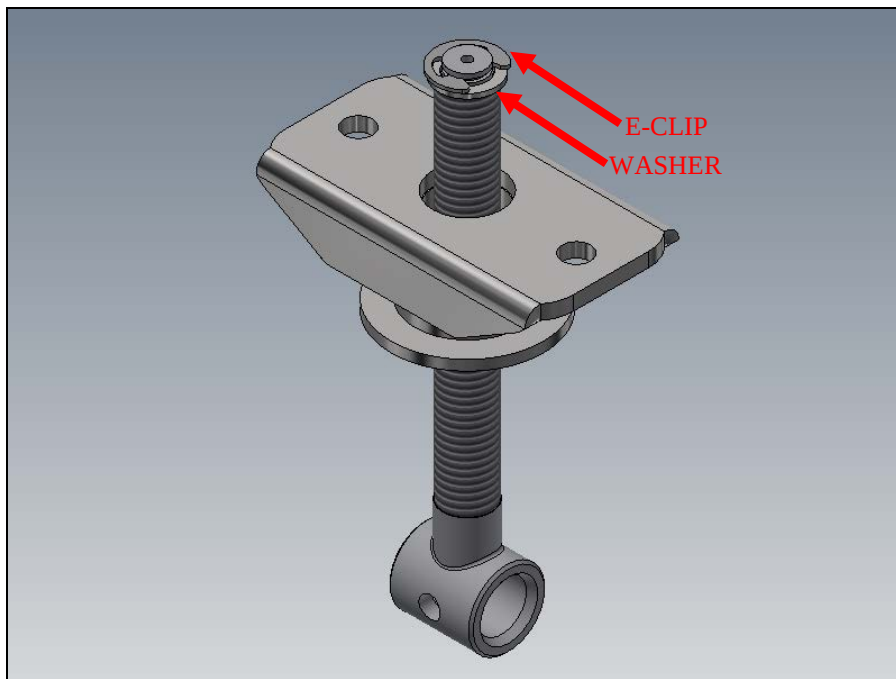
The following instructions are for the assembly of the HSFPTTxxx truck manways plates.



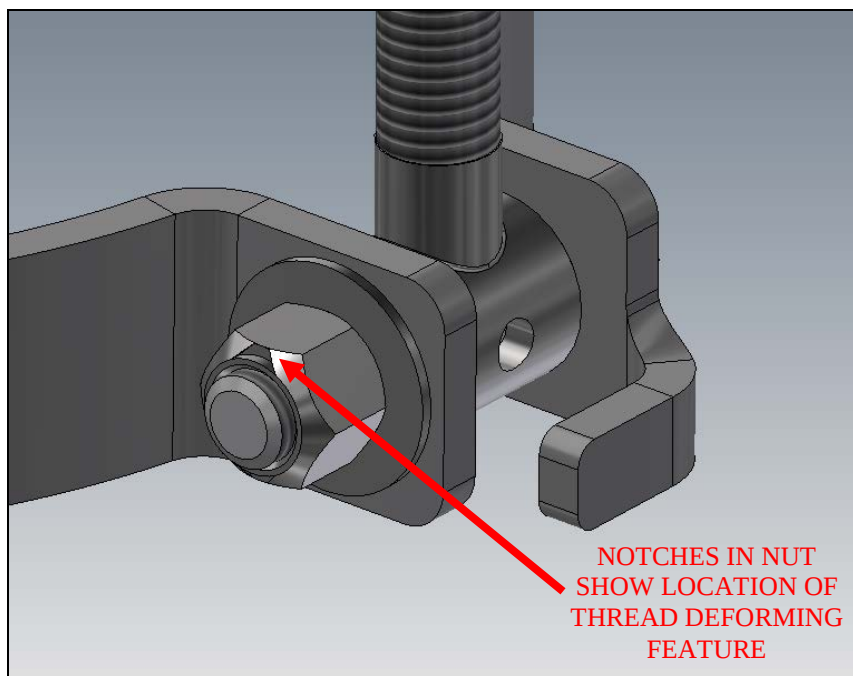
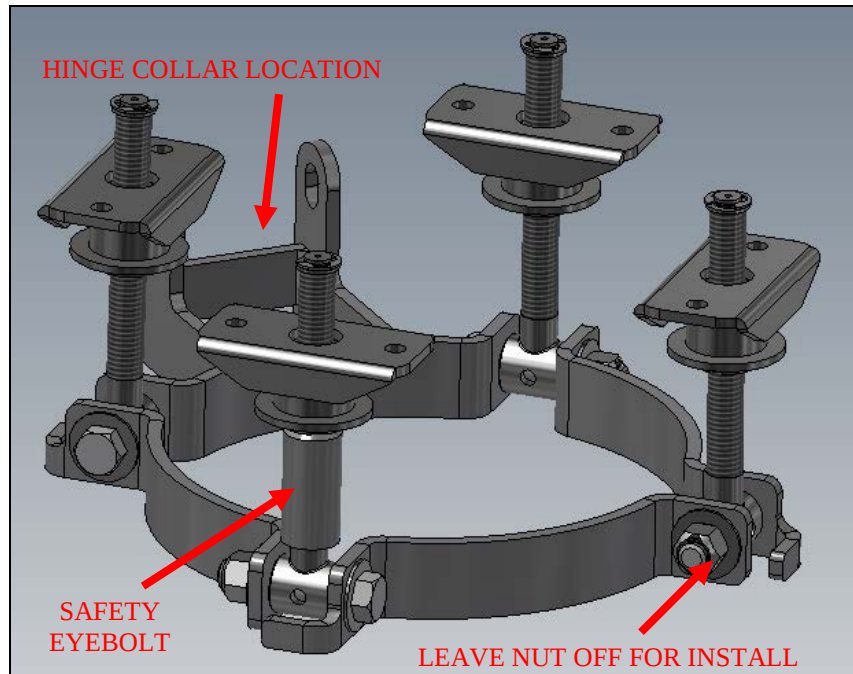
- 1) For the safety eyebolt, slide the spring down over the threaded portion of the eyebolt until it makes contact with the eyebolt head. Install the collar. The pocket inside the collar will fit over the spring. Assemble the rest of the eyebolt as described in Step 1.



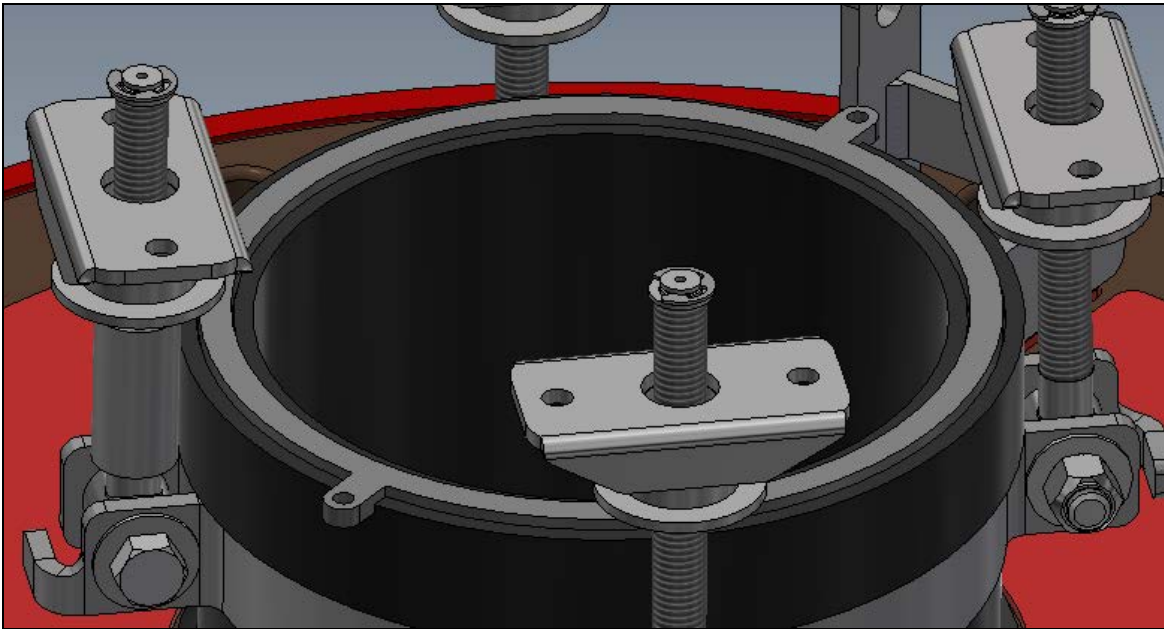
- 2) Assemble the eyebolts. Lubricate the nut with anti-seize and thread the nut onto the eyebolt in the orientation shown. Place the washer over the end of the eyebolt, then secure it by installing the e-clip into the slot on the end of the eyebolt. Repeat this three times.



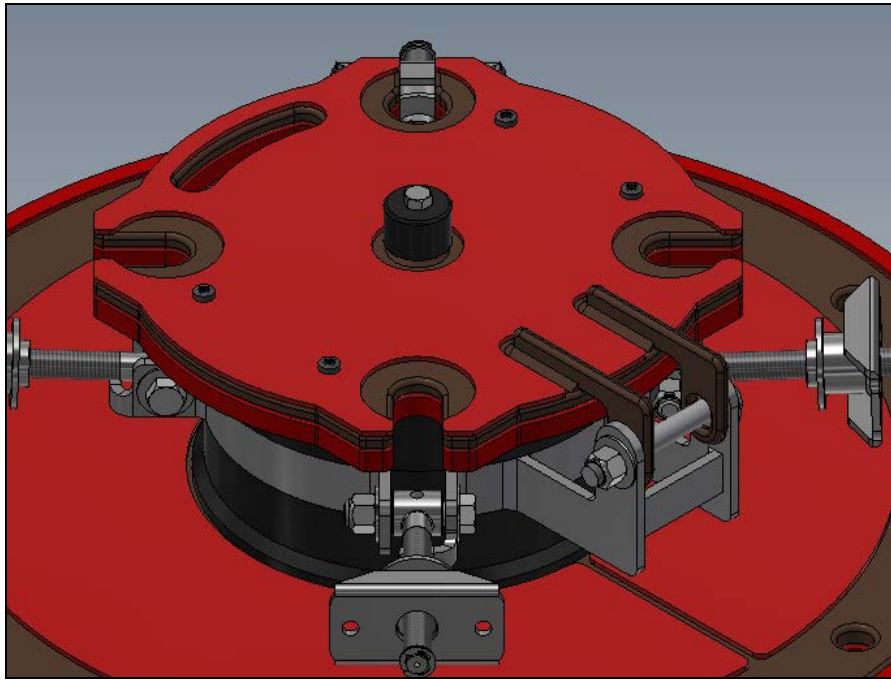
- 3) Away from the plate, assemble the eyebolt collar as shown. The safety eyebolt needs to be placed in the position shown in relation to the location of the collar with the hinge brackets. Lubricate the nuts with anti-seize. The top lock nuts have a thread deforming feature on one end. Be sure to thread them on with the thread deforming feature towards the end of the bolts. **HAND TIGHTEN THE NUTS ONLY!** Leave one nut off for now in order to install the collar assembly.



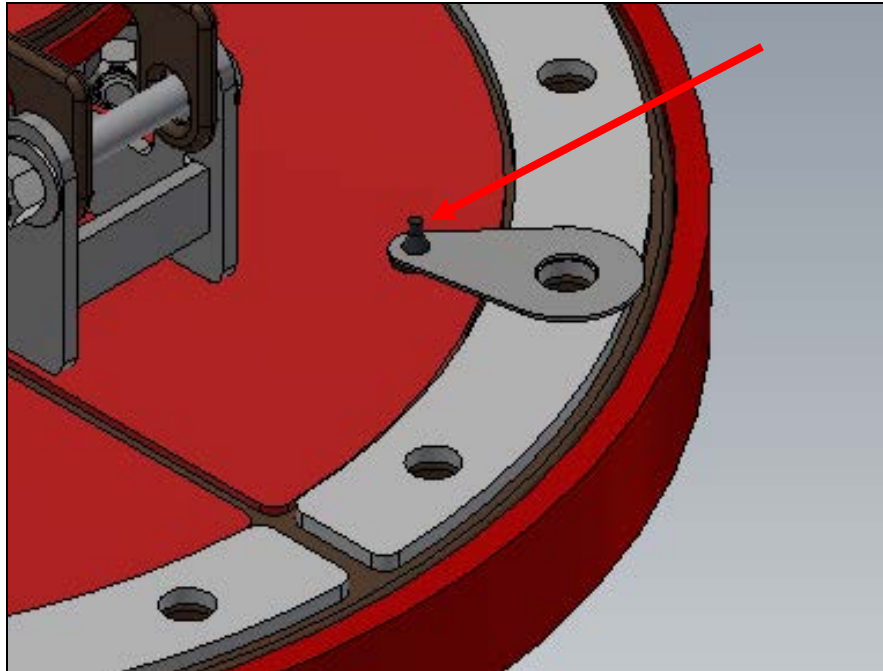
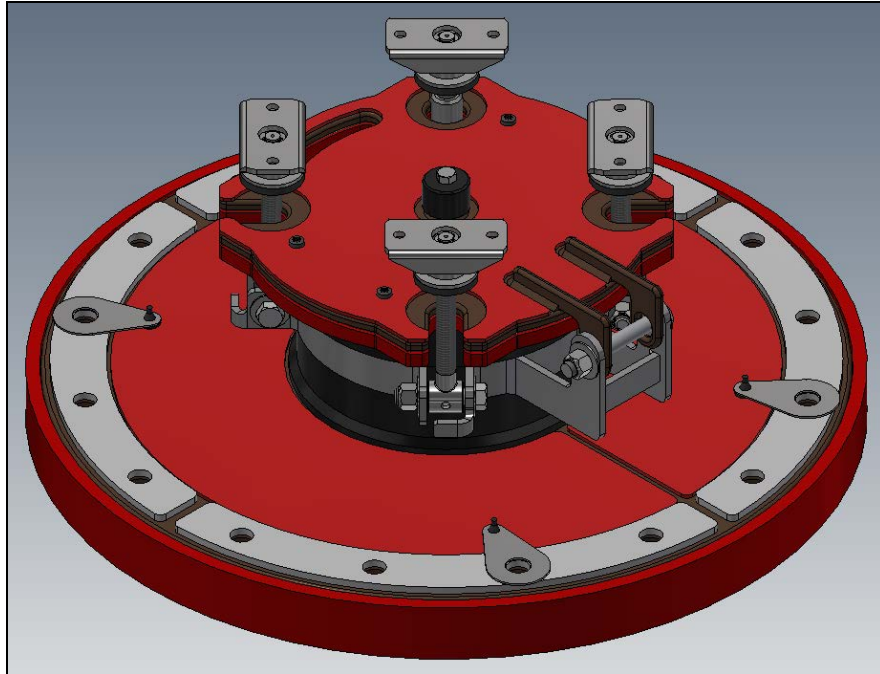
- 4) Install the collar assembly onto the fill nozzle. Make sure that ALL FOUR collars are installed in the groove around the fill nozzle. Apply anti-seize and install the last top lock nut. Using 3/4" wrenches, tighten each of the four nuts EQUALLY until the collar assembly is sufficiently tight so that the collar sections do not fall out of the groove in the fill nozzle. The collar assembly should still be able to freely spin 360° around the fill nozzle. DO NOT OVERTIGHTEN THE COLLAR ASSEMBLY SO THAT IT CANNOT BE ROTATED!
- 5) Place the fill nozzle gasket into the gasket groove on top of the nozzle. Make sure the gasket is sitting down in the groove all the way around. Align the two tabs on the gasket with the grooves in the fill nozzle on the plate.



- 6) Install the fill nozzle cover. Install the hinge hardware as shown. Lubricate the nut with anti-seize. This is also a top lock nut, so be sure to orient the notches in the nut as shown in Step 3. Tighten the nut until there's only about 1/32" of side-to-side motion in the bolt. Make sure the bolt can still slide up and down. Do not overtighten the nut to the point that the collar hinge brackets start to bend.



- 7) Place a gasket onto the flange of the trailer. Install the truck manway plate, being sure to align the bolt holes to the trailer flange. Place the supplied SS segmented washers on top of the plate around the outside. The four supplied lobe washers should be placed on top of the segmented washers and evenly spaced around the plate. The leg of the rubber inserts should be pointing up. These lobe washers hold the Salco PE protective sheet in place.



- 8) Install the fasteners to secure the manway plate to the trailer. Be sure to apply anti-seize to the threads. Follow the 16-bolt or 20-bolt torque sequence (star pattern) as shown below. Salco recommends the following procedure:

Finger tight (snug) – rotational pattern

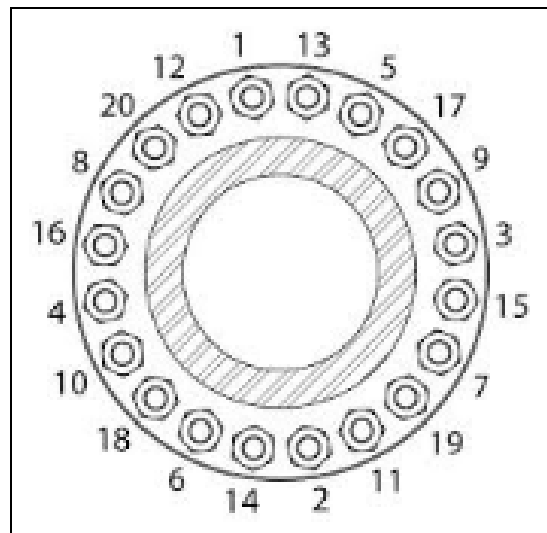
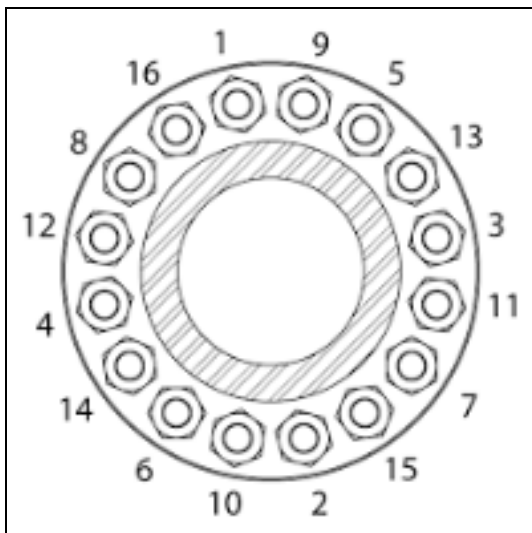
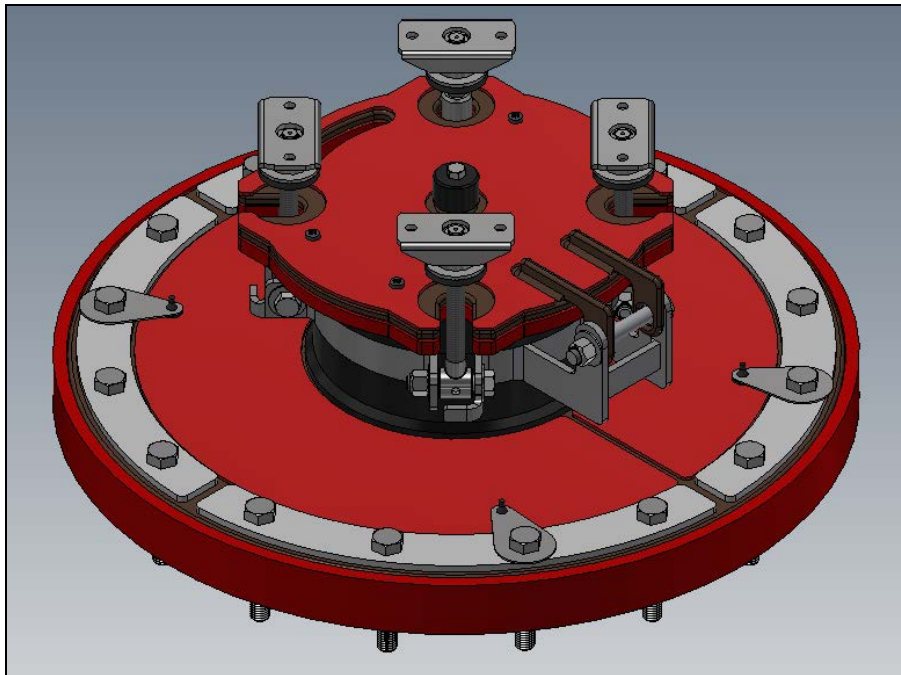
1st pass (50% final torque) – star pattern

2nd pass (75% final torque) – star pattern

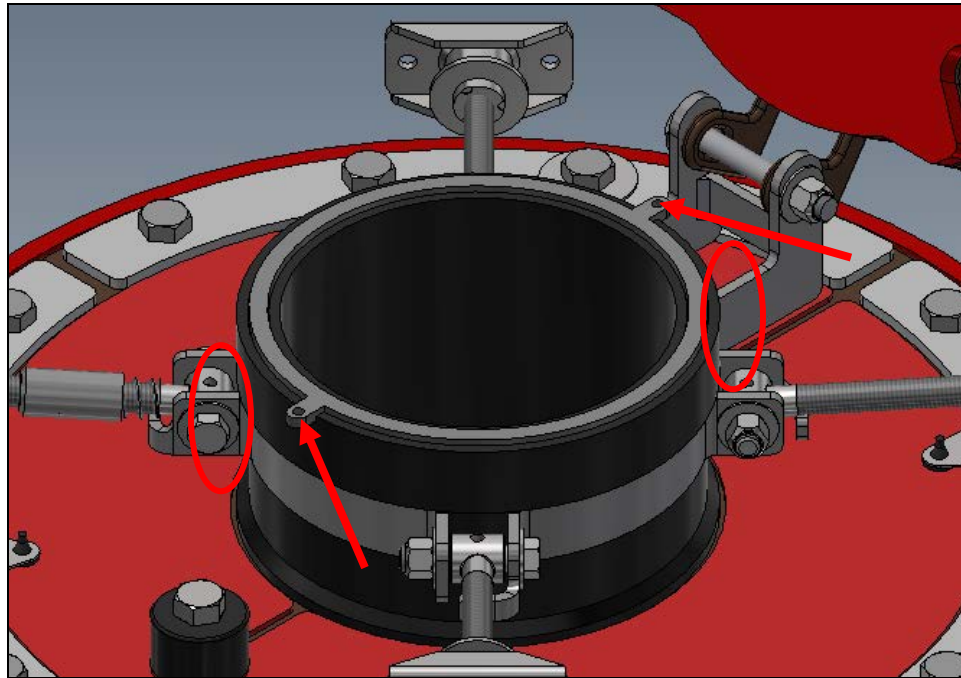
3rd pass (100% final torque) – star pattern

4th pass (100% final torque check) – rotational pattern

Customers may substitute their own torquing procedure as they see fit. Final torque values will vary depending on gasket material, grade of fasteners, etc. It is the responsibility of the customer to determine appropriate torque values.



- 9) Rotate the eyebolt collar assembly and fill cover to the proper location so that the fill cover opens in a desired direction and the eyebolts are accessible. Evenly tighten the four fasteners on the eyebolt collar to a final torque of 5-10 ft-lbs. **Do not overtighten the collar bolts.** Do not tighten the fasteners to the point that the collars pinch the eyebolts and prevent free rotation. A good test after torquing is to grab the hinged collar and pull up. If the hinged collar moves, tighten the fasteners a bit more. If the hinged collar is solid, the assembly is torqued properly.
- 10) Using the two supplied plastic security seals, attach the gasket to the eyebolt collar. The seals should go through the holes in the tabs on the fill nozzle gasket. Wrap the seals around the tabs on the collars or the hinge on the hinged collar. The seals are intended to retain the gasket and prevent it from sticking to the underside of the fill cover and potentially falling into the trailer.



- 11) Close the fill cover and hand tighten the four eyebolts. Tool tighten the nuts an additional $\frac{1}{4}$ to $\frac{1}{2}$ turn. Customers may substitute their own torquing procedure as they see fit.

- 12) If the truck manway contains additional 2" and/or 3" flanges, SS segmented washers MUST be used on the underside of the flanges. Install the fasteners to secure any additional components to the manway plate. Be sure to apply anti-seize to the threads. Follow the 4-bolt criss-cross torque sequence. Salco recommends the following procedure:

Finger tight (snug) – rotational pattern

1st pass (50% final torque) – criss-cross pattern

2nd pass (75% final torque) – criss-cross pattern

3rd pass (100% final torque) – criss-cross pattern

4th pass (100% final torque check) – rotational pattern

Customers may substitute their own torquing procedure as they see fit. Final torque values will vary depending on gasket material, grade of fasteners, etc. It is the responsibility of the customer to determine appropriate torque values.

