

**BMI, CHIEF**  
**24' and 27' (40°) HOPPER CONE**  
**ASSEMBLY MANUAL**

Maximum Capacities

24' – 40°	421.8t
27' – 40°	542.4t

**Jun 27, 2007**

### STEP 1

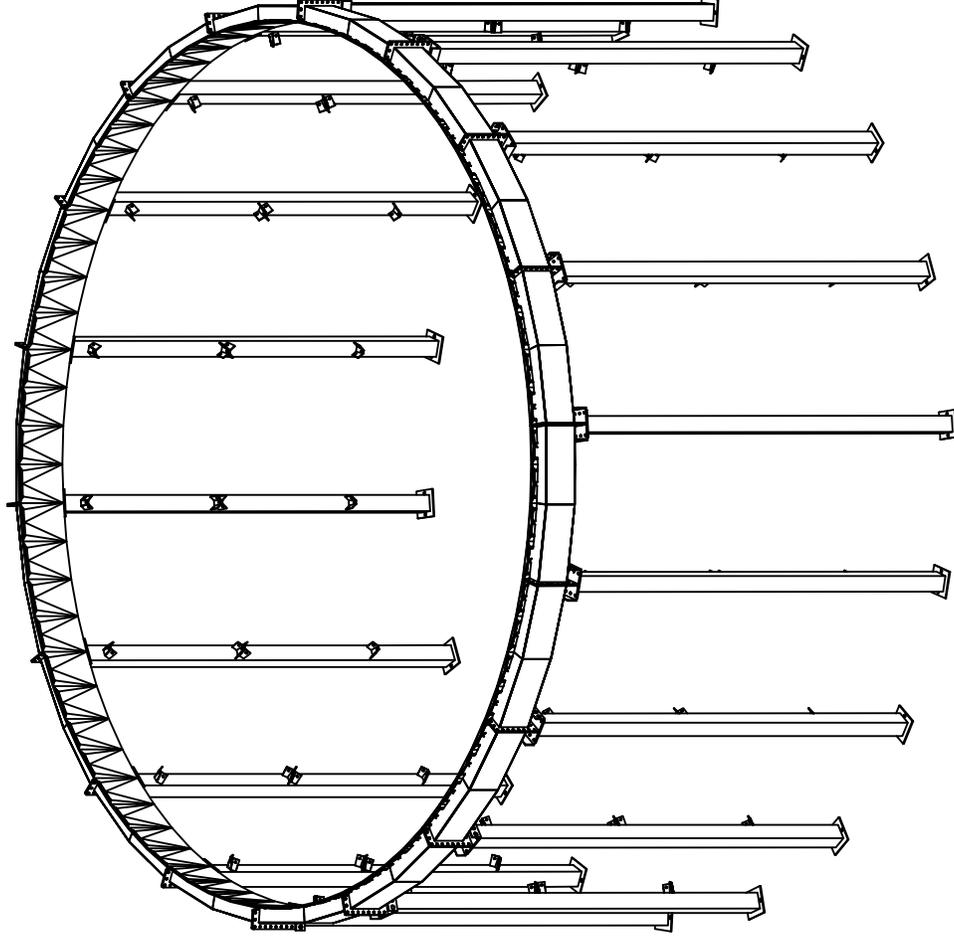
- Verify that all parts are available according to the packing slip. If a skid is used, go to step 2. If no skid is used, go to step 3.

### STEP 2

- If a skid is used, set up the skid with the 5/8" hardware provided. Level the skid and tighten the skid bolts. Support the skid on 4"x4" blocks (not supplied) to allow for easy access to the bolts attaching the legs to the skid.

### STEP 3

- Loosely bolt 4 legs and 4 box sections together on the ground using the 5/8" hardware. The legs must have the brace clips facing the inside. Stand the sections up and loosely secure to skid or other foundation. Repeat until all leg and box pieces are standing. It is now possible to loosely bolt these sections together. It is important that no fasteners are tightened at this point.

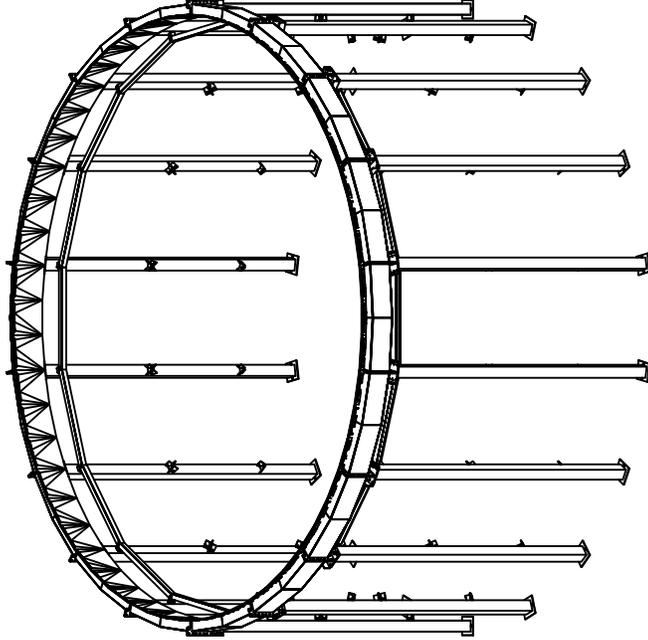


**STEP 4 Skip for Standard**

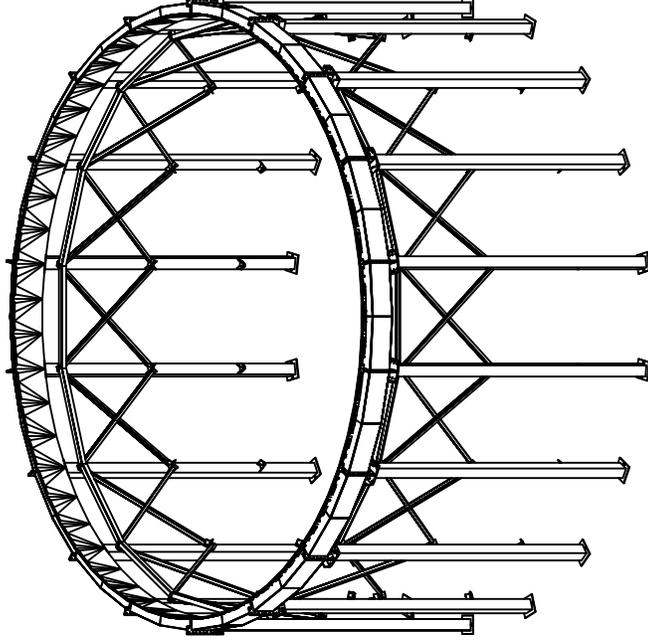
- Install the upper lateral braces (galvanized angle irons). The 5/8" hardware should be left loose. The lateral braces are installed with the vertical portion facing downward to prevent holding water.

**STEP 5**

- Install the channel shaped X braces in an X pattern using the 5/8" hardware. X braces are installed with the open portion of the channel downward to prevent holding water. Do not tighten the hardware.



**Step 4**



**Step 5**

### STEP 6 Heavy Duty

- Install the second set of lateral braces between the two middle clips. Place the vertical portion of the braces downward just as with the upper lateral braces. Do not tighten the hardware.

### STEP 6 Standard

- Install the lateral braces only on lower clips. Place the vertical portion of the braces downward. Do not tighten the hardware.

### STEP 7 only for Heavy duty

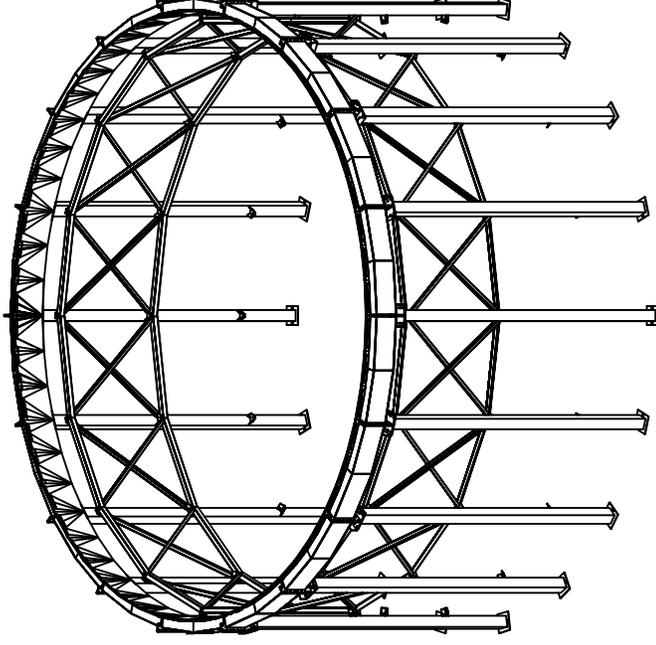
- Install the lower set of x braces in a X pattern with the 5/8" hardware. The open part of the channel downwards. Do not tighten the hardware.

### STEP 8

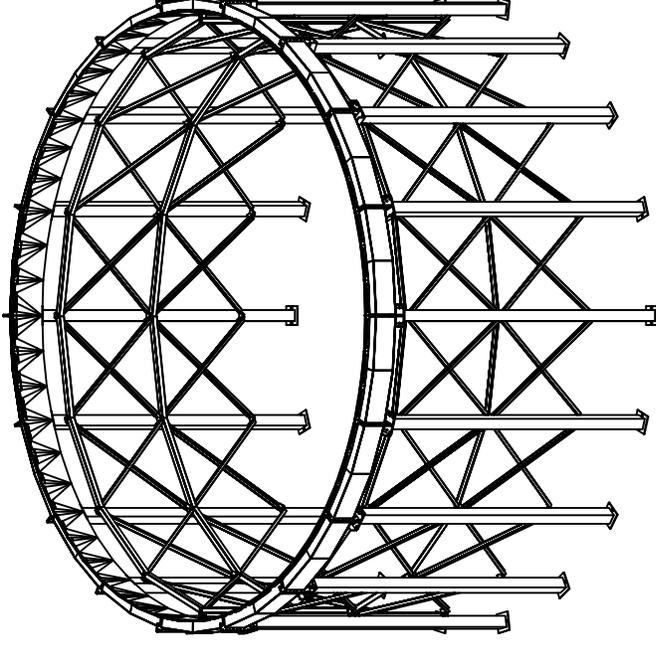
- Tighten the hardware on the box frame and then the hardware attaching the legs to the box frame.

### STEP 9

- Tighten the remaining hardware in the following order:
  - Upper lateral bracing (HD only)
  - Upper X bracing
  - Lower lateral bracing
  - Lower X bracing (HD only)



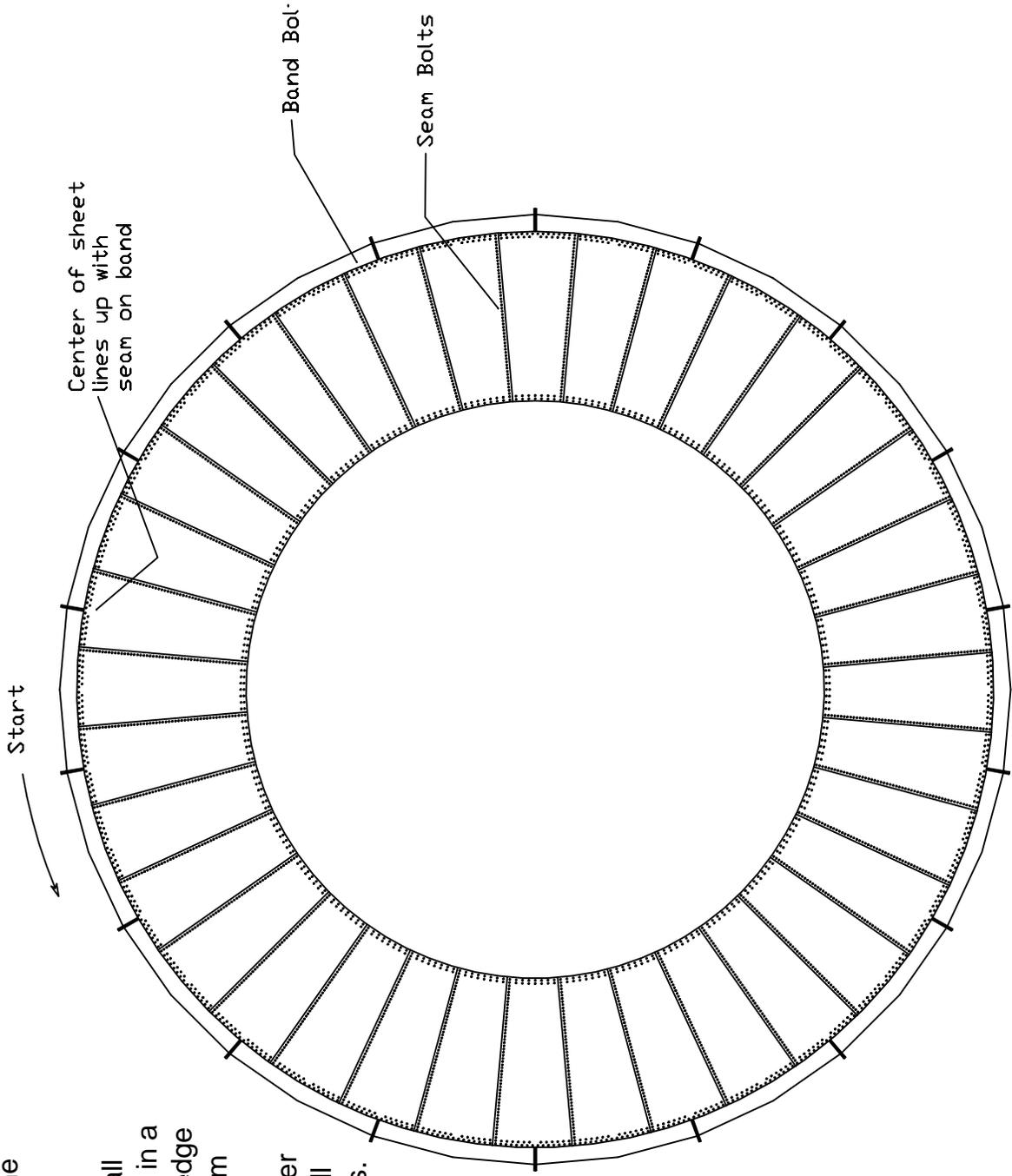
Step 6



Step 7

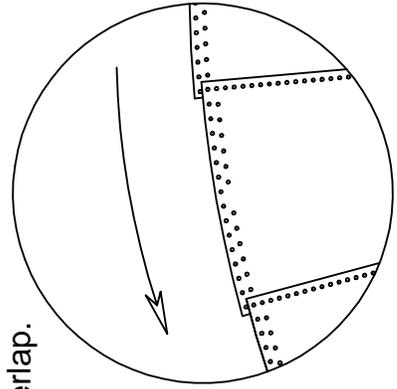
### STEP 10

- Install upper galvanized sheets on the top web starting with the center of the sheet lining up with the center of the band. Use the 3/8" hardware. Install all band bolts and then add the next sheet in a counterclockwise direction. (Formed edge will be on outside). Install the bolts from the inside out. (the nuts will be on the outside of the cone. This ensures better clean out inside the bin). Always install the band bolts before doing the seams.



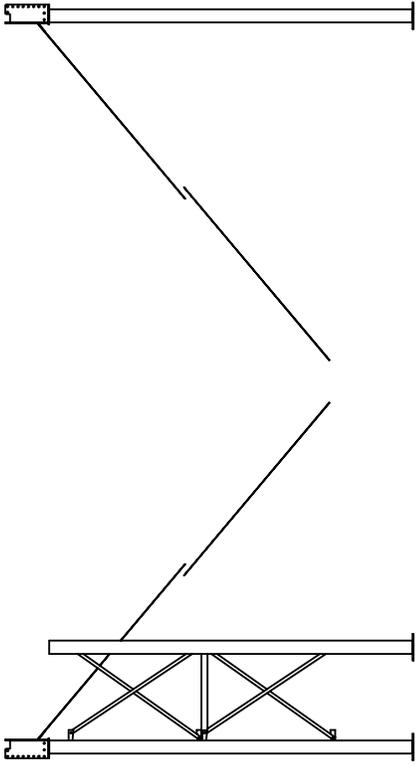
(Looking down on hopper)

Detail showing proper sheet overlap.

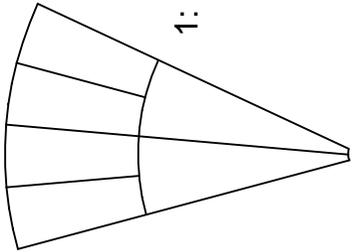


**STEP 11**

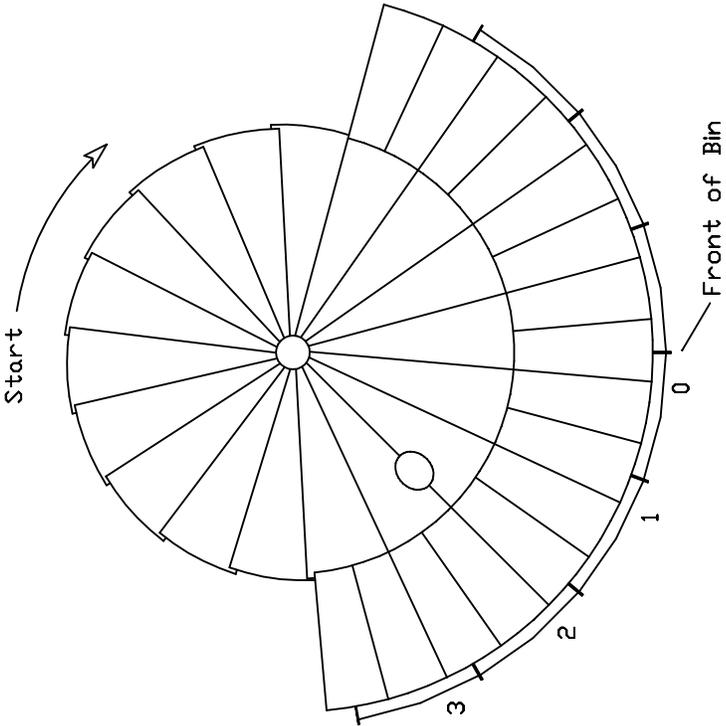
- Install the lower galvanized sheets
- 1. Align the seams on the first top and bottom sheet
- 2. Bottom sheet lap upper sheet to the outside.
- 3. Proceed in **CLOCKWISE** direction. Formed edge will be on outside



2: Bottom sheet lap upper sheet to the outside



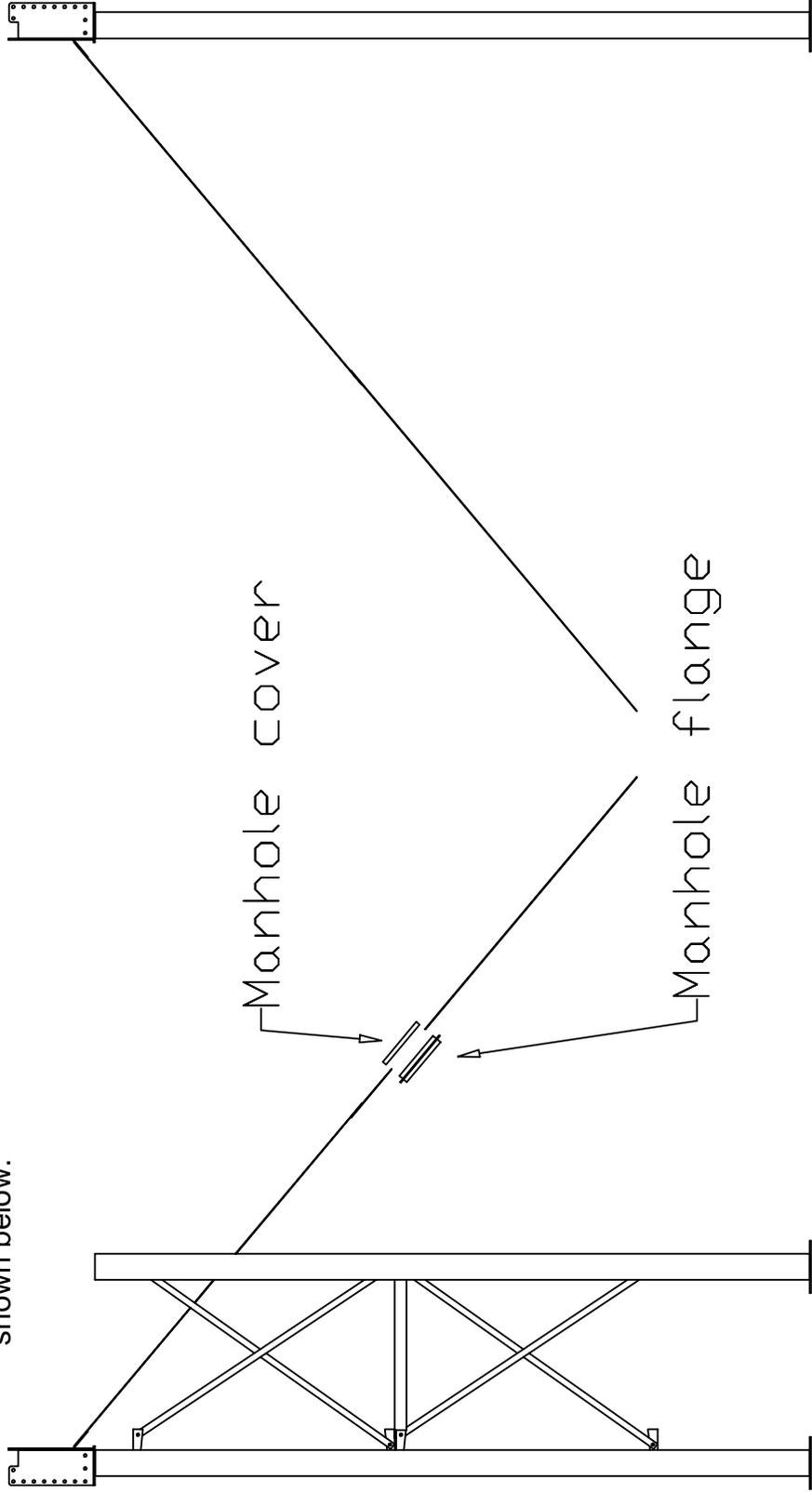
1: Line up seams



3: Formed edge on outside (Looking down on hopper from above). Note the rotation of lower sheets relative to front of bin. Also note the location of the manhole relative to the front of the bin.

Step 12

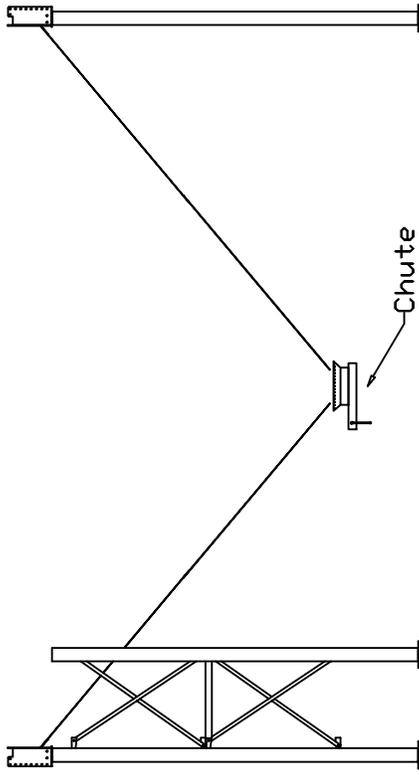
Manhole cover should be placed inside bin and manhole flange installed from outside of bin as shown below.



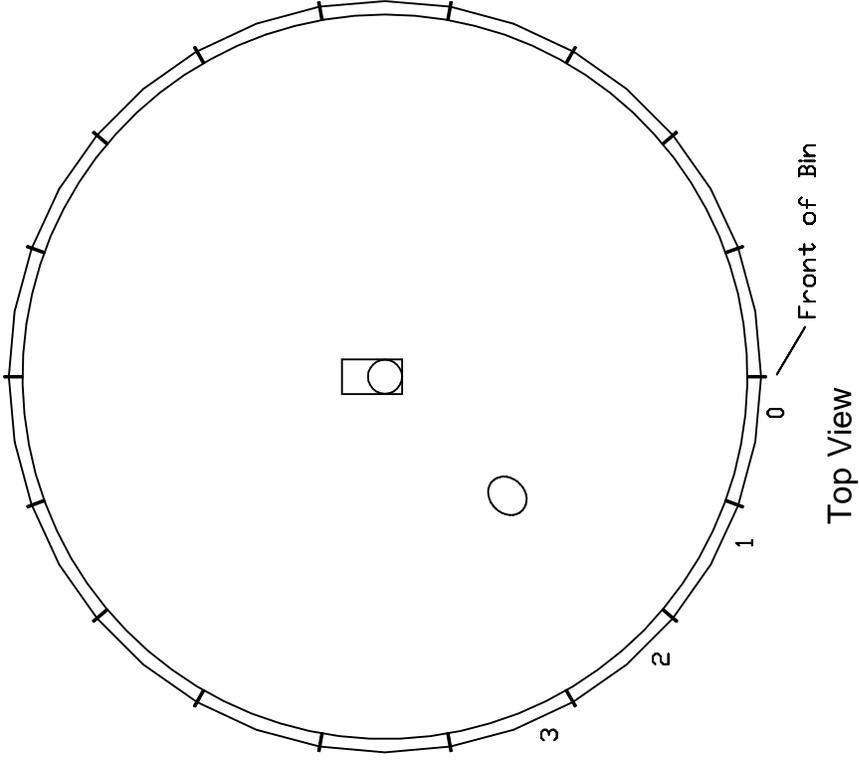
Manhole flange bolts to outside of cone

Step 13

Install Chute. Chute bolts to outside of the cone as shown in 1. The rotation of the chute relative to the front of the bin is shown in 2.



1: Chute bolts to bottom of cone



Top View

2: Chute should be installed as shown at right.