

Large Bottom Sump Installation Instructions

1. GENERAL

1.1. Before beginning the large bottom sump installation, read through the entire Large Bottom Sump Installation Instructions (subsequently referred to as "LBS Instructions") and the Xerxes Installation Manual and Operating Guidelines (subsequently referred to as "Installation Manual").

1.2. It is the responsibility of the owner, installer and operator to follow all requirements contained in the LBS Instructions and the Installation Manual, and comply with all federal, state and local regulations that may apply to LBS installation, operations and maintenance.

1.3. No instructions or procedures presented in the LBS Instructions and the Installation Manual should be interpreted so as to put at risk any person's health or safety, or to harm any property or the environment.

1.4. A Xerxes large bottom sump is designed to allow for the maximum volume of water or wastewater to be pumped out of a Xerxes tank. (See *FIGURE 1-1*.) It is available in a 30-inch-diameter and a 48-inch-diameter size.

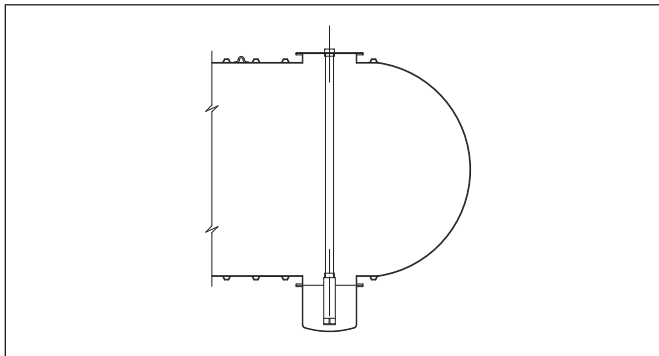


FIGURE 1-1

1.5. Assembly and installation of the bottom sump is the responsibility of the tank owner.

1.6. Before beginning to assemble and install the bottom sump, check the tank (according to instructions in the Installation Manual) to ensure that the tank was not damaged during delivery, unloading and handling on the job site.

1.7. Always use lifting lug(s) when lifting the tank.

1.8. When handling a tank with a bottom sump, always take extra care so that the bottom sump is not damaged by contact with any other object, such as the truck bed or the ground.

2. ATTACHING BOTTOM SUMP TO TANK

2.1. The tank comes with bolting flanges at the bottom of the tank and on the bottom sump. These come in separate pieces to allow for shipping. The bottom sump must be attached to the bolting flange before installation. This assembly must be done aboveground.

2.2. Using the lifting lugs situated on the side of the tank, set the tank on the ground so it is in a rotated position. (See *FIGURE 2-1*.)

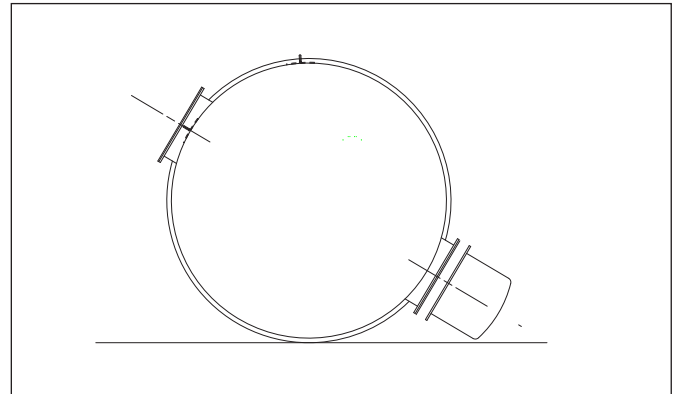


FIGURE 2-1

2.3. Position the bottom sump so that it is in line with the flange on the bottom of the tank.

2.4. Place the gaskets on the flange and the sump, and bolt the sump to the bottom of the tank using the bolting pattern as shown in *FIGURE 2-2*. (A double-gasket system has been supplied for this application.)

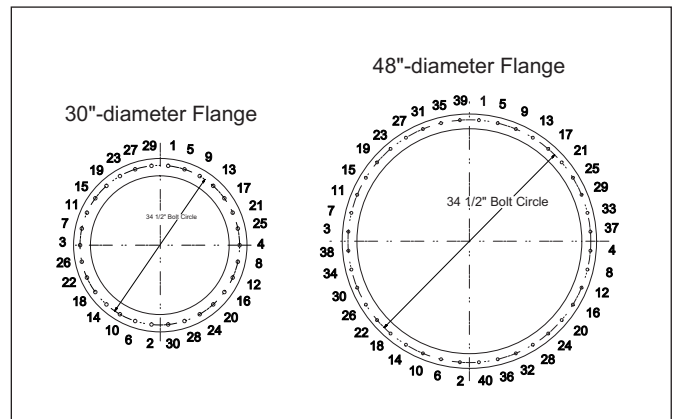


FIGURE 2-2

2.5. Tighten the bolts to 25 foot-pounds.

3. PREINSTALLATION TESTING

3.1. If possible, test the tank and flange joint using the standard 5 psig air test as instructed in the Installation Manual.

4. PREPARING THE EXCAVATION

4.1. Dig a hole in the bottom of the excavation that is large enough to accommodate the sump.

4.2. Proceed with the installation by adding the required 12 inches of approved backfill material to the bottom of the excavation (including the bottom sump hole in the excavation) as specified in the Installation Manual.

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5. ROTATING AND SETTING THE TANK AFTER ASSEMBLY

5.1. General

5.1.1. Rotate the tank into its upright position. This can be done either inside or outside the excavation hole as conditions permit.

5.2. ROTATING THE TANK OUTSIDE THE EXCAVATION

5.2.1. When rotating the tank aboveground (outside the excavation hole), dig a separate bottom sump hole alongside the tank. It needs to be large enough to accommodate the sump when rotating the tank. (See FIGURE 5-1.)

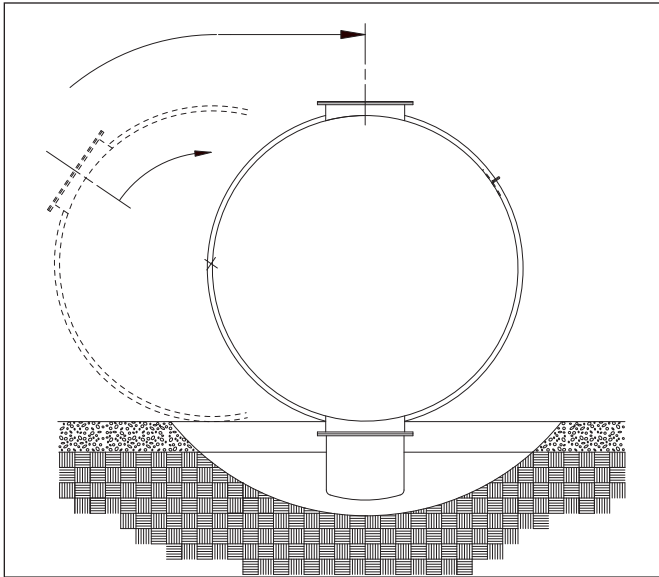


FIGURE 5-1

5.2.2. Slope the sides of the aboveground bottom sump hole as shown in FIGURE 5-1. This will allow rotating the tank into position.

5.2.3. Align the tank lengthwise alongside the aboveground bottom sump hole so that the bottom sump is lined up with the hole as shown in FIGURE 5-1 and FIGURE 5-2.

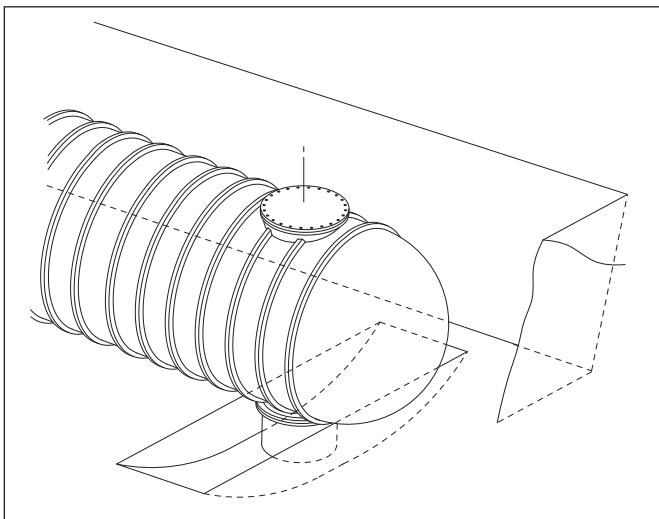


FIGURE 5-2

5.2.4. Use the lifting lugs that are situated at the top centerline of the tank and move the upright tank into place in the excavation as shown in FIGURE 5-3

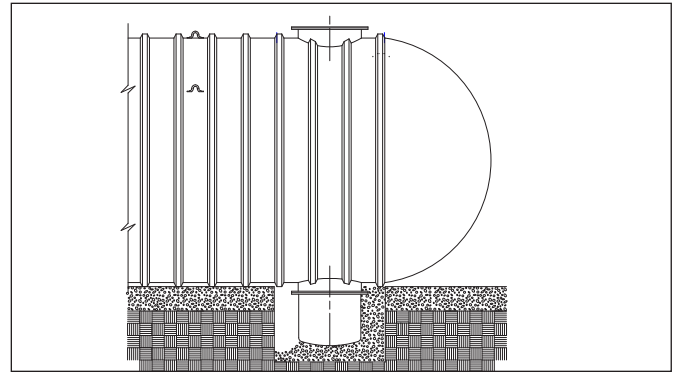


FIGURE 5-3

5.3. ROTATING THE TANK INSIDE THE EXCAVATION

5.3.1. When rotating the tank inside the excavation, slope the sides of the bottom sump hole in the excavation as shown in FIGURE 5-2. This will allow rotating the tank into position.

5.3.2. Align the tank lengthwise alongside the bottom sump hole in the excavation so that the bottom sump is lined up with the hole as shown in FIGURE 5-1.

5.3.3. Use the lifting lugs that are situated at the top centerline of the tank and rotate the tank to its upright position as shown in FIGURE 5-3.

6. BACKFILLING AND PIPING

6.1. Using approved backfill material as specified in the Installation Manual, thoroughly backfill the area around the bottom sump. (See FIGURE 5-3.)

Note: There should be no voids or air pockets.

6.2. Add piping as necessary.

6.3. Finish backfilling to the top of the tank as specified in the Installation Manual. (See FIGURE 6-1.)

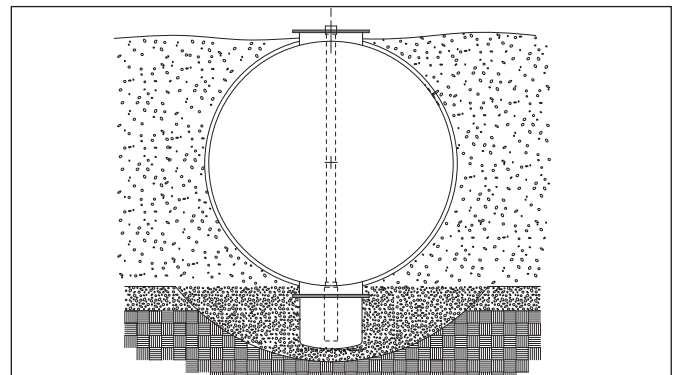


FIGURE 6-1

7. POSTINSTALLATION TESTING

7.1. Test the tank according to instructions and requirements of the Installation Manual.

8. PIPING AND VENTING

8.1. Follow instructions in the Piping and Venting Section of Installation Manual.

9. BACKFILLING TO GRADE

9.1. Follow instructions in the Backfilling to Grade Section of Installation Manual.