

# Biotube® Low-Head Pump Vaults

## Step 1. Prepare Vault for Installation

**Step 1a.** Before installing the vault, measure the tank opening, and verify the following diameters:

- Tank opening is between 18in (457mm) and 21in (533mm)
- Riser is at least 24in (600mm), nominal

**Step 1b.** Measure from the top of the tank to the rim of the riser. This is the access distance.

**Step 1c.** Subtract 6in (152mm) from the access distance. This is the minimum extension length. For best access, the filter cartridge handle should extend to within 6in (152mm) of the access riser lid.

**Step 1d.** For the handle extension, obtain a length of 1in (25mm) PVC pipe no shorter than the minimum extension length determined in Step 1c, a pipe cutting tool (if needed), and PVC cement.

**Step 1e.** Remove any loose items from the vault.

**Step 1f.** Insert the Biotube filter into the vault.

**Step 1g.** Fully seat the filter.

## Step 2. Lower Vault into Position

**Step 2a.** Lower the vault into position.

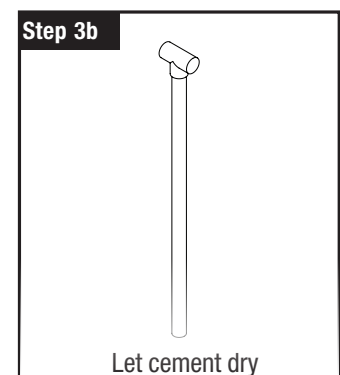
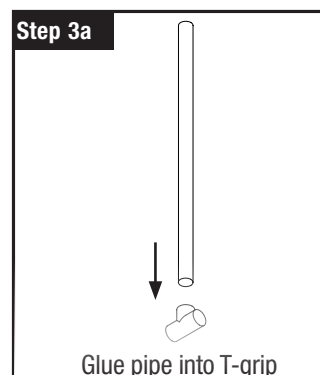
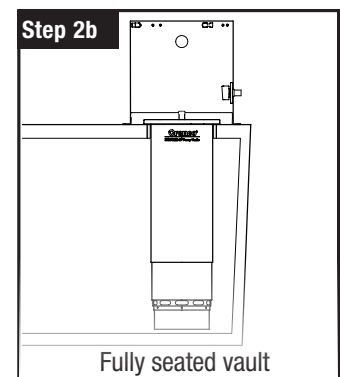
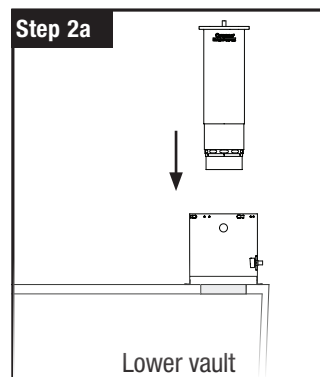
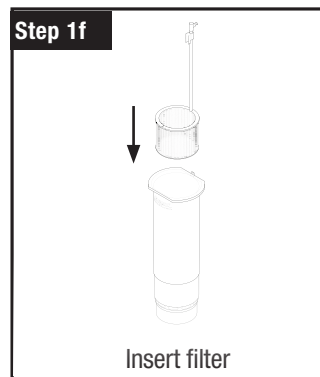
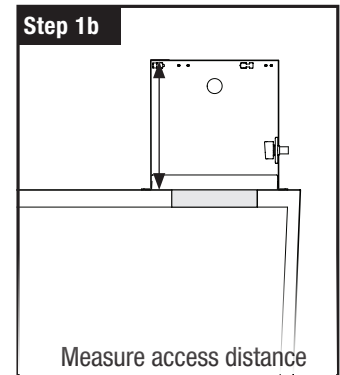
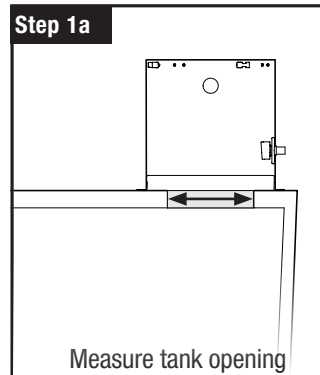
**Step 2b.** Make sure the vault is fully seated.

**Step 2c.** Position the vault in the riser to avoid interfering with plumbing or wiring. The penetration for the pump discharge in the access riser wall will determine the overall position of the vault.

## Step 3. Assemble Handle Extension

**Step 3a.** Use PVC cement to glue one end of the PVC pipe into the T-grip handle.

**Step 3b.** Let the cement dry completely.



**Step 4. Adjust Handle, if Necessary**

**Step 4a.** Make sure that the assembled handle extension is not so long as to interfere with the lid attachment on the riser.

**Step 4b.** Use the pipe cutting tool to trim the extension if necessary.

**Step 4c.** Use PVC cement to glue the extension handle into the Biotube filter cartridge handle's tee.

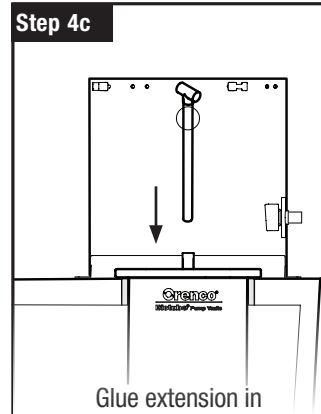
**Step 4d.** Let the cement dry completely.

**Step 5. Attach Float Switch Assembly**

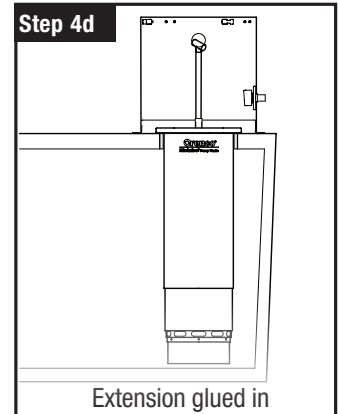
Attach the float switch assembly as described in [Float Switch Assembly Installation Instructions, NIN-MF-1](#).

**Step 4b**

Trim extension, if necessary

**Step 4c**

Glue extension in

**Step 4d**

Extension glued in