

Pump Installation Instructions

Below are instructions on how to install an external non-submersible transfer pump to a cistern. Note: every situation is different and you might find yourself needing extra parts to complete the setup. Also there are different brands and types of pumps. For this example we have used the brand: "Superior Pump" 1/2 HP Non-Submersible Transfer Pump, model 90050.

Items Needed

<p style="text-align: center;">Pump</p> 	<p style="text-align: center;">3/4" Reinforced Hose (clear or rubber)</p> 	<p style="text-align: center;">Hose Clamps - 2 qty</p> 
<p style="text-align: center;">Thread Sealant Putty or Thread Seal Tape</p> 	<p style="text-align: center;">3/4" Female NPT x 3/4" Brass Hose Barb Adapter - 2 qty</p> 	<p style="text-align: center;">Wrench</p> 
<p style="text-align: center;">Outdoor Power Cord</p> 	<p style="text-align: center;">Screwdriver</p> 	<p style="text-align: center;">Garden Hose</p> 
<p style="text-align: center;"><u>Irrigation Box (Optional)</u></p> 		

Directions on Installation

1. Unpack the pump and read through owner's manual thoroughly.
2. Insert the hose adapters that comes with the pump into the inlet and outlet of the pump. Be sure to use either sealant tape or putty on the threads to ensure a watertight seal.



3. Now it's time to attach the hose from the inlet of the pump to the spigot of the cistern. Besure to use sealant putty or tape whenever there is an attachment involving threads.
 - a. Take one of the 3/4" female NPT x 3/4" brass hose barb adapter and attach it into the pump.



- b. Take the other 3/4" female NPT x 3/4" brass hose barb adapter and attach it onto the spigot.



- c. Slip both hose clamps onto the reinforced hose and attach the hose to the barbed ends of the adapters that are on the spigot and the pump.
 - i. Note: it is very important to use a hose that is reinforced with wire. The suction of the water might collapse a hose if it isn't reinforced.



- d. Slide hose clamps towards both ends of the hose, tighten with a screwdriver.



4. Next attach the garden hose to the outlet of the pump.
5. Before starting the pump, make sure there is water in the pump. To do this, open the priming plug on top of the pump with a wrench. Fill with water and close the plug back up. This is mostly for first time use. If the pump has been used recently, there will already be water in the pump for the next start cycle.



6. Now we can start the pump! Open up the spigot so that water flow is ready to go. Plug in the pump using the power cord. The pump will start automatically. Now the hose will have pressure just like from right out a spigot!

Optional Irrigation Box Housing

Not required but might be aesthetically pleasing is to house the pump in an irrigation box. This method might also prevent theft and protects the pump from any outside elements.



Winter Storage

It is highly recommended to put away the pump during the winter months to protect it from freezing conditions.