



FT-413 Spire Fountain Assembly Instructions

Fountain Information:

- This fountain holds approximately 3 gallons of water.
- This fountain uses a medium fountain cover: FTNCOV-SM
- No refill device or submersible lights are suggested for this fountain.

Pump Information:

WP450LV - 120 GPH Low Voltage Pump (16 ft. cord length)

Tools Required: Bubble Level

Bubble Level Screwdriver





Fountain Components				
Image	Item Description	Component Item #	Quantity	
	Spire Fountain - Water Feature	FT-413A	1	
	Spire Fountain - Basin	Ft-413B	1	

Pump Kit Parts List			
Image	Component	Quantity	
	PK120LV Pump with Transformer	1	
•	#7 Stopper	1	
	2" length of PermaGum putty		
	8" length of 1/2" black non-kink tubing	1	
1	1" length of 5/8" clear tubing	1	
	1" length of 1/2" CPVC pipe	1	
\bigcirc	Hose Clamps	1	

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Fountain Set-Up:

Assembly & Installation - A fountain can be difficult to install without knowing and understanding the steps involved. To ensure your fountain is installed properly, please read our instructions and tips before you begin.

- Step 1 Seek Professional Help: Check if professional installation is recommended for your fountain.
- **Step 2 Check Foundation:** Place your fountain on a level surface. It is recommended to place your fountain on concrete or a hard packed gravel pad. If the base is level but some components seem off, rotate components or use wedges to level them.
- **Step 3 Create a Drip Loop:** To prevent water from dripping down the cord and damaging the electrical socket, create a drip loop by allowing the pump power cord to fall below the wall outlet.
- **Step 4 Use a GFCI Outlet:** Use only a GFCI outlet when running a fountain.

Assemble your fountain on a level surface capable of holding a minimum of 135 lbs with an approximate 0.75 sq. ft. footprint (actual dimensions 10" x 10").

- **Step 1 -** Position the basin (FT-413B) where the fountain is to be installed, ensuring that it is level.
- **Step 2 -** Assemble the pump kit:
 - **2a** NOTE: Do not plug the pump into the transformer until assembly is complete.
 - **2b** Using a hose clamp and screwdriver, attach the 1/2" end of the non-kink tubing to the pump outlet.
 - **2c** Place one end of the PermaGum putty onto the pump cord approximately about 6-8" from the pump.
 - 2d Wrap the putty around the cord once. See image "A"
 - **2e -** Place the stopper around the putty. Keep the top edge of the putty and stopper flush. See image "B"
 - **2f** Cut off the excess putty so that it is even with the outer edge of the slit.
- **Step 3** Feed the pump cord through the hole in the basin (FT-413B) and out of the channel.
- **Step 4 -** FIRMLY press the stopper into the hole evenly.
 - **4a** Note: Using the handle of a screwdriver or hammer works best to press the stopper in place. See image "C"
- **Step 5** Fill the basin enough to cover the pump completely with water to check for leaking.
 - **5a** If leaking occurs...
 - Remove the stopper and repeat step 4 again.
 - Use some of the excess putty to seal the cord around the top of the stopper. See image "D" $\,$
 - Let the fountain dry completely, then use 100% clear silicone to seal around the pump cord and perimeter of the stopper.

Note: Silicone must set for 24 hours before adding water.

Step 6 - Coil the pump cord in the pump house and push the pump down as far into the pump house as possible.



FT-413B (96 lbs) 28"W x 35.75"H









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Step 7 - Insert the CPVC end of the tubing assembly into the bottom of the water feature (FT-413A).

Step 8 - Center the water feature (FT-413A) in the basin (FT-413B) ensuring that it is level.

8a - Turn the feature and coil the tubing as you lower it into position.

Maintenance:

- **Pump Care** The fountain relies heavily on the quality of the pump. A well-maintained pump can last several years.
 - Step 1 Fully submerge: Ensure the pump is fully submerged at all times to avoid damage.
 - Step 2 Ensure water level is sufficient: Check water levels regularly as water may evaporate over time, and periodically change water to avoid algae buildup.
 - **Step 3 Clean pump:** Use soap and water, or white vinegar and water, with a small, soft brush to clean the pump of debris, dirt, and algae buildup. This should be done every 2-3 months.

Surface Care - Paints and finishes may fade over time due to weathering. By following these tips, you will be able to maintain your fountain's surface.

- Step 1 Control Algae and White Scale: Due to water evaporation, you may see white residue on your fountain surface from the mineral content in your water supply. Algaecides and cleansers can help prevent buildup that occurs from minerals and hard water.
- Step 2 Protect and Refinish: Depending on the material of your fountain, protectants and sprays may prolong the appearance of the surface. Paint and refinishing kits can be used for touch-up.

<u>Winter Care</u> - Many materials used to produce fountains can expand and contract in different temperatures/humidity levels. If the temperature falls below 32°F or humidity levels change drastically, follow the steps below to protect your fountain.

- Step 1 Bring inside: If possible, bring your outdoor fountain inside for the winter.
- Step 2 Store in dry location: If unable to bring inside, store your fountain in a dry and covered location.
- **Step 3 Bring components inside:** Move all internal components (stoppers, tubing, lights, pump, etc) inside. A pump can stay in a fountain for the winter, but if you choose to leave it in, it must be completely dry and insulated with plastic bags and towel to ensure it stays dry. However it is recommended to bring it inside.
- **Step 4 Completely drain:** It is important to prevent water from accumulating anywhere, as freezing and thawing of water can cause pump damage and cause cracks to form in your fountain. Remove the drain plugs.
- **Step 5 Elevate Fountain:** Fountains may freeze to the ground and cause cracking in the base if left outside in the winter. If unable to store inside or in a dry covered location, try to raise your fountain above ground.
- **Step 6 Cover Fountain:** Make sure to use a breathable material when covering. **DO NOT COVER IN PLASTIC!** Make sure the fountain cover is taut so that no snow or water can pool in the cover. Tie the opening at the bottom of the cover around the fountain.

Troubleshooting:

<u>Pump Not Working</u> - When operating the pump for the first time, it can take a few minutes before water begins to flow properly. If it is still not working after a few minutes, please follow our troubleshooting tips below. **Before troubleshooting, UNPLUG YOUR PUMP.**

- Step 1 Submerge Pump: Ensure your pump is fully submerged in water at all times to avoid pump damage.
- **Step 2 Manual Check:** If the pump cover is removable, try removing the cover to access the impeller area. Turn the rotor to ensure it is not broken or jammed.

Pump Noise - Some sound from the pump may be normal, but you can follow these tips to reduce sound or resolve abnormal noises.

- Step 1 Submerge Pump: Ensure your pump is fully submerged at all times and clean of debris, dirt and algae buildup.
- Step 2 Check Location: You may hear the vibration of the pump touching the side walls of the fountain. Make sure the pump is only touching the bottom.
- Step 3 Check Flow Rate: Too low of a flow rate might cause spews or burps.

Water Flow Rate - Some fountains come with a dial or valve to adjust the flow rate, but if you do not have this option or if you are still unsatisfied with your flow rate after changing the settings, check out our tips below.

- Step 1 Adjust the Water Level: Insufficient water levels can affect water intake by the pump. Check the fountain instructions to ensure the appropriate water capacity for your fountain.
- Step 2 Check for Kinks: Check to make sure the tubing is not kinked. Kinks in the tubing can slow or halt the flow of water.
- Step 3 Clamp the Hose: To slow the water flow, try clamping the hose with a hose clamp or zip-tie.

<u>Splashing</u> - Having trouble with splashing? Some splashing is inevitable, especially when you first turn on your fountain, but if you are experiencing excessive splashing, try our troubleshooting tips below.

- Step 1 Adjust the Water Level: Ensure the pump is fully submerged, but avoid overfilling your fountain.
- Step 2 Flow Rate: If your pump includes a dial or valve to adjust the flow rate, try changing the settings to see if it affects splashing. If your pump is not adjustable, check our Flow Rate section to learn about other ways to change the flow rate.
- Step 3 Adjust Position: Try arranging stones or placing a splash guard, at the fountain base. You can also place a screen in the basin.

Leaking - If your fountain is leaking, check these quick tips on how to fix it.

- Step 1 Adjust the Water Level: Your fountain may leak if it is too full.
- **Step 2 Check Tubing:** Check that the tubing is attached completely and correctly.
- Step 3 Check Stopper: Ensure stopper is completely seated in the fountain. You can also use 100% pure clear silicone to ensure a proper seal is achieved
- Step 4 Cracking: Your fountain may be cracked from improper winter care; see Winter Care in Maintenance Tips.