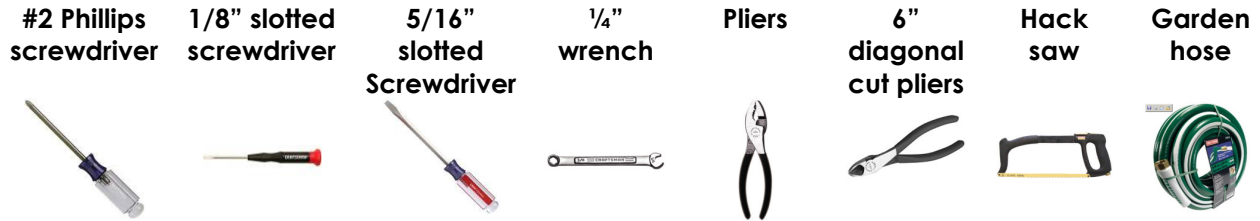






Manifold Removal and Replacement Procedure



Tools required:






Before you begin, read and understand all steps of the procedure before beginning so as to familiarize yourself with what is required. Use common sense and always work safe.

1	<p>Turn electrical power off to your spa by turning off its GFCI breaker.</p> <p>Note: It is recommended that you lock this GFCI breaker box so that no one can accidentally turn the power back on while you are working.</p>	
2	<p>Behind trim buttons¹ there are eight #2 Phillips screws holding this panel on: 3 on the left trim piece, 3 on the right trim piece, and 2 on the bottom. Remove the trim pieces and then the bottom screws. As you remove the bottom screws, this panel will fall. Lift the panel out of the way and store all parts in a safe place.</p> <p>CAUTION: This panel weighs at least 10 pounds and will fall down to the ground as the bottom screws are removed. Keep your feet clear of the bottom of the panel and be prepared for this to happen.</p>	
3	<p>Unplug the black spa pack power cord from its receptacle in the grey box.</p>	
4	<p>Locate the leaking manifold. If necessary, remove the panel to access this leak.</p>	
5	<p>Drain the spa completely. To do this:</p> <ul style="list-style-type: none"> • Remove the protective cap from the drain bib • Connect a garden hose to the drain bib fitting • Put the other end of the hose downhill from the drain • Open the drain bib by turning the outer ring counter-clockwise • Pull out on the drain bib to fully open the drain • Allow the water level to drain down completely • Close the drain bib by pushing in on the outer ring and turning it clockwise • Remove the garden hose • Put the protective cap back on the drain bib 	

¹ Some spas do not use trim buttons to cover the screws.

6	<p>Take some time now and carefully plan where you will cut through the existing pipe. Plan to cut off enough pipe to allow the splice and new pipe to position the new manifold in about the same location as the current manifold. Mark the location of the cut.</p> <p>Note: You must have about four inches (4") of pipe remaining on the spa after cutting off the old manifold. It is better for you to have more pipe left than needed and re-cut it than to cut off too much now. If you cut off too much pipe, you must replace the pipe and the next fitting.</p>	PLAN AHEAD
7	<p>Using either the hack saw or the PVC pipe cutter, cut the pipe off at the mark.</p> <p>Note: Do not disconnect the hoses connected to the manifold at this time.</p>	
8	<ul style="list-style-type: none"> • Cut the replacement piece of pipe that fits between the splice and the new manifold • With the old manifold moved out of the way, dry fit the splice, replacement pipe, and new manifold together to test the fit • Trim the replacement pipe if necessary to put the new manifold in about the same position as the old manifold <p>Note: Do not glue the pieces together at this time.</p>	
9	<p>Plan the assembly order of the pipe so that it can be glued and assembled quickly. Make sure that the new manifold is oriented in exactly the same way as the old manifold. Follow these gluing instructions to glue:</p> <ul style="list-style-type: none"> • The replacement pipe to the splice • The splice to the existing pipe, and finally • The manifold to the replacement pipe <p>Note: Allow a few minutes between gluing each joint to permit the glue for that joint to properly set.</p>	PLAN AHEAD
10	<p>Using the pliers, loosen the dual-wire hose clamps one at a time and move that piece of tubing from the old manifold to the same place on the new manifold. Repeat this step for all tubing.</p>	
11	<ul style="list-style-type: none"> • Remove the garden hose from the drain • Close the valve by pushing in on the outer ring and rotating it Clockwise • Put on the protective cap 	 <p>Outer ring</p> <p>Protective cap</p>
12	<ul style="list-style-type: none"> • Connect a standard garden hose to a faucet with regular cold tap water (not softened water or hot water) • Put the pre-filter on the other end of the hose, put the pre-filter into the skimmer basket, and turn on the hose • Fill the spa until the water level is about 1/4 inch below the top of the Weir door (skimmer edge) or just above all jets 	

13	Once the water level is proper, check the manifold, joints, and tubing for any water leaks.	
14	Plug in the spa pack.	
15	Turn on the GFCI breaker.	
16	<ul style="list-style-type: none"> • Turn Pump 1 on high, turn Pump 2 on (if present), and turn on the blower. • Check for leaks again. 	
17	<p>Replace the silver insulation and all panels. Replace the trim buttons over the screws (if present).</p> <p> Tip: It is safest to have two people install these panels: one holding the panel in place while the other puts in the screws.</p>	