

Additional assembly instructions for Polar AquaKing (v. 092009)

Thank you for choosing a product from SpaDealers. Polar AquaKing is a unique wooden spabath with a plastic inner lining and edging. This makes cleaning easy and protects the wood. When assembling it is very important to follow the instructions in order to avoid leakages. Please read our guarantee conditions and what they include.

NOTE! All wooden parts must be stored at a dry location and be dry during assembly. Never assemble in the rain or when humidity is high.

These additional assembly instructions contain important descriptions, which refer to the picture numbers shown in the graphic instructions. This text refers to AquaKing Jets. The assembly of AquaKing Standard follows the same procedure, but the holes and parts needed for connecting the jet massage are not included. **If you have any queries, please contact us at +358-(0)10-239 5600 or info@spadealers.fi**

Taping the joint before applying sealant

IMPORTANT! Before starting to fill the joints, masking tape should be applied according to recommendations. See pictures **1**, **2**, **3** and **4**. Masking tape needs to be placed outside the pre-marked line. **Note** where the masking tape starts and ends according to the letters in the pictures. This is important, because it will be easier to remove the tape when the sealing procedure has finished. Otherwise, there is a risk of not getting a good final finish and might cause problems later. **NOTE!** Study the details in the pictures, for example the folding of the first masking tape, picture **1** /**e/B**. The reason for this is the fact that you need something to grip when removing the tape. Check additional instruction “Mask properly”.

Sealing groove and nozzles for sealant

Grooves have been made in the benches and side parts in order to guarantee the best possible fit. There are also grooves made for the sealant. Pictures **5** and **7**. The assembly tools contain a nozzle for the black sealing compound which is used to fill the cut outs and grooves. **VERY IMPORTANT!** Fill the grooves with a bit more sealing compound than necessary, just that it comes into contact with the other surface by pressing it down, see picture **5** /**D**. However, be careful that you **do not use too much** of it, because it can get quite difficult to press the surfaces against each other.

Assembly of seating area

The seating area is assembled so that 3 benches are assembled first, picture **7**. Then assemble the other 3 benches and put both sets of benches facing each other, picture **8**. Assemble on a clean smooth cardboard surface or similar to avoid scratching the benches. Use the included textile hoop in order to tighten the seating area. Place the seating area on the level shown in picture **10** /**F** and tighten carefully. Carefully tap the vertical sides and the benches with a rubber mallet. The arrows in picture **9** show the recommended places. Tighten a bit more and repeat tapping gently with the rubber mallet. Go all the way round and try to tighten the seating area as well as possible. The theoretical opening between the benches is 1.5 mm divided equally between all the benches. If too much sealant has been used, it is possible that the seating area won't become tight enough. In such a situation it can help to tap the benches and let the tightening pressure press the sealant together. Tighten the angle bar to each seat, picture **9** /**8**.

Afterwards please assemble the air valves of the bubble system. It is important to apply silicone beneath the air valves and on top of the threads. Smear the silicone down on the threads using your finger. The rubber sealing ring should be placed on the backside and not beneath the air valves, picture **11**.

Now you can start with the caulking of the seating area's inside in alphabetical order according to pictures 9 and 10. The sealant should be evened out until it covers the surfaces to the masking tape. Repeat a few times. It is recommended to use your finger for this. Remember to rinse your finger with turpentine afterwards. It's important that the sealant is smoothed out thin towards the edge of the masking tape, in order to make it easier to remove the tape.

Bubble system assembly

After the caulking has been completed, the bubble system's hoses can be assembled. Note that the placement in picture 12 shows the AquaKing Jets, where one vertical part (at the very bottom) has a hole for connection to an extra pump for optional extra jets and lamp. The AquaKing Standard without extras doesn't have these extra holes. One hose for the T-connection 20x32x20 (marked with a !) is longer than the other and it should be placed as shown in picture 12.

Adjusting the seating area to the base

When the base has been assembled the connection pipes for the pressure and suction side should be mounted now (picture 15), the two horizontal grooves are filled with sealing compound and smoothed out, picture 16. Now fill the sealing agent in the base's joints, picture 17. After having done this it is time to lift the seating area into position. The T-connection for the bubble system air hose connection must be mounted in the same direction and place as shown in picture 17! If the seating area is correctly assembled, it will now fit into the groove at the base. Otherwise, adjustments might be necessary. Do these by gently tapping the vertical sides with a rubber mallet to make them fit into the grooves. Then gently tap on top of the benches to make the assembly fall down into the grooves and come in contact with the sealant.

Attending to the sealing joint for the seating area and base

Then turn the base upwards in order to be able to screw it to the seating area, picture 18. Use the included screw 4.5x50 mm (3), picture 18/3. In order to get the right distance between the base and the bench, use the included 6 pre-cut pieces, picture 18/10. The adjustment of side modules is then easy. After this procedure, the sealing joint between the base and the seating area must be fixed and smoothed out, picture 19/a. Then do the same with the upper joint between the benches, picture 19/b. **Remove the masking tape now.** Start at the point where the masking tape is folded and then pull outwards, picture 20. Let the joints dry. Check additional instruction "Mask properly".

Preparing the side modules

While the joints are drying you can start taping the side modules joints (unless it hasn't already been done). It is important to do this according to the instructions. See picture 22 and tape in the right order **a-c**. Check additional instruction "Mask properly". Also check for possible small cracks and holes due to knots in the side module where the TubCoat application does not cover. They are unlikely, but not impossible. *If you find cracks or holes, mend them by putting a bit of sealant on top of them. Press the sealant in and smooth it out. Wipe extra sealant off with a bit of turpentine. This gives a result that is virtually invisible.*

IMPORTANT!!! Leakage test

One important part of the assembly process is the leakage test. This is first made with the seating area. Note that the joints should be coated first. Check additional instruction "Mask properly" for drying times in section 4. The test must be made in stages according to the graphic instructions. Before this, the bubble system air hose with vent and connection to air pump must be mounted, picture 30/Q. The included pipe system for pumps must also be connected and the taps must be closed. The massage pump connection for the AquaKing Jets should be mounted with its lower part turned towards the bench during the test, so the water doesn't leak out. If there is a lamp

(accessory), it should also be mounted according to the instructions. This can be done while the joints dry.

Mending leakages for joints

If a leakage is detected, it should be fixed before the next test is made. Mark the leakage, empty the water, wipe clean, mask the spot where the leakage has been detected (and at least 10 cm to each side), put on some sealant, press it down and smooth it out with your finger. Then remove the tape. You can now do the next test without drying time. Continue until the entire seating area has been tested. Empty the water and then continue with the assembly of the side modules.

ATTENTION! A leakage which has not been resolved correctly can lead quite likely to other leakages due to its material movements. A leakage should be always resolved from “inside” and without any delay.

Side module assembly

Before starting the side module assembly, apply masking tape to the top of the benches around the entire seating area. Follow the marked line, picture 23. Start by mounting the side module with the hole, and place it opposite the suction and pressure side at the base. When doing the assembly, the masked line of the side module (left and right side) must fit in so it meets exactly the line of the joints on the seating module, picture 24/L. When the side modules are assembled so that horizontal and vertical joints follow each other, the result will look good. The side modules should follow the outer line where the masking tape is, picture 24/K, 25/M. NOTE! The side should not be tapped so hard that they move towards the masking tape. At the base, there is also a line showing approximately how far the three longer staves should be tapped inwards, picture 24/J.

Tightening the hot tub

After the side modules have been assembled, they must be tightened and “locked” with 2 included stainless hoops. Follow the measurements and placing shown in picture 26. The tightening must be made in stages. First tighten the lower part, but only until it feels a bit tight. Walk around the tub and tap with the rubber mallet at the height where the side modules and benches are fastened to each other. Try to get an even distance between side modules and the line where the masking tape is. At this stage it is still possible to make the vertical groove on the side to follow the joint between the benches. NOTE! Be careful and don’t tap the outer staves in the outer-most side module from the side. This could cause cracks along the joint that is already plasticized. If cracks occur they must be dealt with later according to the method that has been described earlier in the chapter “**Preparing the side modules**”. Tighten the upper hoop every time the lower hoop has been fixed. The opening between the hoops should be approx. 40 mm when they are tightened enough, picture 26/N.

Sealing benches and sides

First fill the vertical grooves between the side modules, 6 pcs, with sealant. Then apply sealant to the joint between benches and sides, picture 27. Smooth everything out before removing masking tape, picture 28. Let the joints dry and then add coating. Check additional instruction “Mask properly” for drying times, section 5.

Leakage test above benches

When everything else has been assembled, including the thermostat sensor and skimmer. Use silicone in the hole for the screws. If you have an AquaKing Jets, all the jet nozzles should also be mounted with included hose connections. Follow separate instructions. HINT! This can be also done while the joints are drying. A leakage test can now be made above the benches. First, fill water over the joint where the benches and the sides are mounted, picture 29/1. Check for any leakages. Then make the leakage test above, picture 29/2. Normally there is no reason why there should be a

leakage above the benches. If not enough care has been taken when assembling the side modules, there is a risk that a crack could occur in the thin part of the inner tongue. In such cases, the risk of leakage above the joint between the benches and side module is high, and almost always there is then a leakage in the side stave tongue, which makes water drip in the lower end. Find the crack and resolve it promptly according to chapter “**Preparing the side modules**”.

Mounting insulation and side panels

After the leakage test has been made, the mounting of the insulation and side panels can begin. Note the place for the first side insulation, pictures **30/P** and **31/R**. If the bubble system air connection has not been mounted yet, do it now. See picture **30/O** for placement. Mount the side insulation so that the upper edge is at the same height as the side modules and fasten the panel. Use a part of the edge in order to get the panel and the insulation at the same height as the side module, picture **31**. Follow the measurements shown in picture **31/R**. HINT! Nail small nails in the side modules, 4 pcs for each insulation sheet, which makes it easy to fasten the side insulation, picture **30/P**. Before putting the covering shelf in place, the control system level indicator must be mounted. See separate instructions concerning this. Assemble the rim, picture **35, 36, 37**. HINT! Use silicone around the holes and screws. This is just to make sure that no water can get in the hole, picture **35/1/5**. Do the same where the brown **protection covers** for the screws will be put on, picture **37**. Before mounting the rim please put some masking tape 1 cm beneath the upper edge of the tub. When the rim has been mounted, apply some sealing compound between thios and the side wall and smooth it out. When finished you can take off the masking tape.

Turn the tub so that it is lying on its side (put something soft underneath) and mount the base insulation. Se sida 19, bild **38** och **39**. Fix the bottom insulation inside the box before the technical parts get installed. The gap between the box’s insulated sides and tub needs to be filled with a insulation foam, picture **42**.

The hot tub is now ready for use.

Remember that water hygiene is important and follow our recommendations concerning this. We hope you thoroughly enjoy your spa bath!