Section 1

Pool Component Installation Manual

General Instructions

Safety Rules For Pool Owners

Your pool contains a large quantity of water, and is deep enough to present inherent dangers to life and health unless the following safety rules are strictly observed. First-time users run the highest risk of injury. Make sure everyone understands all safety rules before entering the pool. Post NO DIVING and NO JUMPING signs beside the pool.

1. No Jumping or Diving
   The top ledge of your pool is not a walkway and must not be used for jumping or diving. Do not permit jumping or diving into the pool from a deck or the top ledge of the pool. Diving or jumping into the pool can result in serious injury.

2. Never use the Pool Alone
   Never permit the pool to be used unless it is attended by at least one person other than the bather. Someone should always be available to lend assistance in an emergency.

3. Never Leave Children Unattended
   Never leave a child alone and unsupervised in or near the pool—not even for a second. There is no substitute for constant adult supervision.

4. No “Rough-housing”
   Do not permit “rough-housing” in and around your pool. Surfaces can become slippery and hazardous when wet.

5. Light the Pool at Night
   If the pool is used after dusk, adequate lighting must be provided. Illumination in the pool area must be sufficient to clearly judge pool depth and all features in and around the pool. For lighting recommendations, consult your local licensed electrical contractor.

6. Restrict Access to the Pool
   Do not leave chairs or other furniture beside the pool that could be used by a child to climb up into the pool. Ladders must be removed whenever the pool is unattended. A fence with a lockable gate around the pool or yard is strongly recommended and may be required by law in some jurisdictions.

7. No Alcohol or Drugs
   The use of alcohol or drugs does not mix with pool activities. Persons who have been drinking alcohol or using any drugs should not be allowed in the pool, and should be carefully supervised in the surrounding area.

8. Keep Your Pool Clean and Sanitary
   Your filter system will remove suspended particles from the water and the surface skimmer will remove insects, leaves and other debris from the water surface. Use the correct pool chemicals as directed to destroy harmful bacteria and prevent formation of algae. Remember, unsanitary water is a serious health hazard.
A. Introduction to Installing your Pool

Read all instructions completely before you begin.

These instructions explain how to install your pool. Simply follow the step-by-step directions. Start with this part, Section 1 and use the other instructions, Section 2 to 4 to put together your entire pool.

Section 1 also has Safety Rules and instructions to help you keep your pool clean and in good shape, year after year. Be sure to read the Safety Rules, and make sure everyone who uses your pool reads and understands them.

B. Determine a Location for your Pool

1. The Terrain

Pay special attention to choosing the right location for your pool:

- Choose a large area, as flat and level as possible.
- Choose a spot on dry, firm earth (stabilizer or other)—do not install the pool on asphalt, tar paper, sand, gravel, peat moss, wood or chemically treated soil.
- Check with your pool dealer to see if Nut Grass grows in your area. This type of grass may grow up through your pool liner. Your dealer will be able to advise how best to treat the site.
- Sloped areas will need to be made level by digging away high spots, not by filling low spots—be prepared to hire earth-moving equipment if necessary.

Important Note:

Ground preparation is one of the most important steps in the installation process. A proper foundation will ensure the rest of the pool assembly goes smoothly and that no problems will occur when the pool is filled with water.
2. **Things to Avoid**

**Do not** locate your pool near or on any of the following:

- Overhanging tree branches.
- Overhead wires and clotheslines.
- Buried pipes and wires—contact your gas, electric and telephone utilities to find buried pipes and wires **before** you dig.
- Hilly and uneven terrain.
- Areas with poor drainage.
- Grass, stones and roots. Grass will rot underneath the pool liner, and stones and roots will damage the pool liner.
- Areas recently treated with oil-based weed killers, chemicals or fertilizers.

3. **Plan Ahead**

- Will you be adding an adjacent deck later? Be sure to leave room.
- Will you be using pool accessories or other appliances that need electricity or gas? Locate your pool near these services or plan to have them installed later by a licensed contractor.

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**C. Prepare the Foundation of your Pool**

1. **Mark out the Area**

   a. Drive a peg into the ground at the centre of the area where you want your pool.

   b. Use a length of string tied between the peg and a can of spray paint, and mark a circle on the ground. Choose the length of string you need for your pool from the chart on the next page. The circle will be 6” (15 cm) bigger all round than the pool.
2. Remove the Sod
   a. Remove all sod and plants from the circle.
   b. Remove any sticks, stones and roots from the circle.

Remember:
Your pool must be perfectly level. Take the time you need to be sure your foundation is perfectly level.

3. Make the Area Flat and Level
   a. Replace the centre peg with a flat-topped stake, at least 1” (25 mm) square and 6” (15 cm) long. Drive it down flush with the ground surface.
   b. Nail one end of a **straight** 5cm x 10cm wood plank to the top of the stake. Choose the length of 5cm x 10cm wood plank you need for your pool from the chart above. Use a nail long enough to hold the end of the 5cm x 10cm wood plank to the stake while you rotate it in a circle.
   c. Put a carpenter’s level on the wood plank and swing the board in a circle to find the high and low spots.

Hint:
Use a surveyor’s transit instead of a carpenter’s level, if one is available.

<table>
<thead>
<tr>
<th>Pool Size</th>
<th>Length of String</th>
<th>Length of plank 5cm x 10cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>12’ (3.66m)</td>
<td>6’-6” (200 cm)</td>
<td>6’-6” (200 cm)</td>
</tr>
<tr>
<td>15’ (4.57m)</td>
<td>8’-0” (244 cm)</td>
<td>8’-0” (244 cm)</td>
</tr>
<tr>
<td>18’ (5.49m)</td>
<td>9’-6” (290 cm)</td>
<td>9’-6” (290 cm)</td>
</tr>
<tr>
<td>21’ (6.40m)</td>
<td>11’-0” (335 cm)</td>
<td>11’-0” (335 cm)</td>
</tr>
<tr>
<td>24’ (7.32m)</td>
<td>12’-6” (380 cm)</td>
<td>12’-6” (380 cm)</td>
</tr>
<tr>
<td>27’ (8.23m)</td>
<td>14’-0” (426 cm)</td>
<td>14’-0” (426 cm)</td>
</tr>
</tbody>
</table>
d. Remove all the high spots with a shovel, hoe or rake. Be prepared to hire earth moving equipment if you need to level a large area. Remember, your pool must be level within 1” (25 mm) across the diameter of the pool.

Option: Make a stabilizer slab based on the pool diameter and add 15cm. The thickness of the stabilizer slab should be around 10cm.

e. Do not fill in low areas. Filling will create an unsafe foundation for your pool. Small dips and hollows may be filled in, but the soil must be hard-packed with a tamping tool.

f. Recheck the outer of the circle, where the pool wall will be. Make sure there are no high or low spots. The bottom edge of the pool wall must rest flat on the ground and have no gaps under it.

Remember:
The outer of the circle must be perfectly flat. The bottom edge of the pool must rest flat on the ground and have no gaps under it. Take the time you need to be sure this area is perfectly flat and level.
4. Patio Stones (Optional)
   a. Concrete patio stones may be placed at the base of each upright of your pool. This is optional, but makes a better foundation for the pool wall. Patio stones 12” (30 cm) or larger will do. Round patio stones will also work. Choose the number of patio stones you need for your pool from the chart on the next page.

<table>
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<th>Number of Patio Stones (Optional)</th>
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<tbody>
<tr>
<td>12’ (3.66m)</td>
<td>10</td>
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<td>18</td>
</tr>
</tbody>
</table>

   b. Temporarily lay out the bottom rails and base plates around the circle. Each base plate will show the location for a patio stone. Make a mark in the ground at each base plate.

   c. Remove the bottom rails and base plates and lay out the patio stones around the circle where the base plates were.

   d. The patio stones must be sunk into the ground so the tops are flush with the soil around them. Use the carpenter’s level to make sure the patio stones are perfectly level and flush with the ground. Use the carpenter’s level and a 5cm x 10cm wood plank between patio stones to make sure the stones are level with each other.

   e. Remove the centre stake and wood plank.

5. Proceed to Section 2
   a. Continue with Section 2 to assemble your pool.
   b. The rest of Section 1 contains information you can use after you finish assembling your pool.
D. Maintaining your Pool

After you have finished installing your pool, follow these instructions to keep it clean and in good shape.

1. The Liner
   a. Check the liner regularly for leaks.
   b. Minor repairs can be made to the liner with a repair kit.

2. Pool Wall and Vertical Columns
   a. Keep the pool wall and vertical columns clean. Wash down every so often with mild soap. **Do not** use abrasives, chemicals or cleansers.
   b. Wash off any spilled pool chemicals right away.
   c. Recoat all showing screw heads with clear outdoor varnish.
   d. Check all metal parts for rust regularly, at least once per season.
   e. Touch up scratches and rusty area on metal parts with matching anti-rust paint. Follow the directions on the paint can.
   f. Every two years, lower the water level in your pool to 12” (30 cm) deep. Remove the top edge of the liner from the pool wall and look for hidden rust on the inside of the pool wall.
   g. Pay special attention to any leaks at the skimmer and return openings. Leaks **must** be fixed immediately.

E. Winterizing your Pool

At the end of the swimming season, you must follow these directions to make your pool ready for the winter.

1. Lower the Water Level
   a. Lower the water level in your pool until it is about 6” (15 cm) below the water return fitting.
   b. Remove all hoses attached to the skimmer and return fittings. **Make sure all water is drained from the skimmer housing, and make sure the hole at the bottom of the skimmer is left UN-PLUGGED.**

2. Check all Joints and Screws
   a. Make sure all the frame joints are fitting together well. Make sure the pool wall has not shifted from the bottom rail.
   b. Make sure all screws and bolts are tight.

3. Check for Rust
   Paint any scratches or rusty areas with anti-rust paint.

4. Check the Liner
   Make sure the top of the liner is still attached to the pool wall with plastic coping. **Do not** remove the liner from the pool. Removal of the liner will void the existing warranty. **Do not** drain all the water from the pool for the winter.

5. Finding Leaks
   Make sure the liner has no leaks. Check the liner for leaks and repair any holes with a vinyl patch. Leaks in the winter can cause severe damage to your pool.

Caution:
Chlorine can damage your pool liner and metal parts. Wash any spills right away.

Remember:
Any rusty areas on the pool wall must be repainted quickly with anti-rust paint. A badly rusted pool wall can collapse in the winter.

Caution:
**Do not** drain all the water from your pool for the winter, and **do not** remove the liner. An empty pool may collapse in the winter.

Continued next page
6. **Pool Accessories**
Remove all pool accessories from the pool, including the ladder. Leave the skimmer and filter parts **attached** to the pool wall. Ensure that the skimmer lid is installed and the opening at the bottom of the skimmer is open so that accumulated water can drain immediately.

7. **The Filter**
Disconnect the filter from the pool. Follow the filter directions for winterizing your filter.

**Important Winterizing Notice**

**All Pools:** The water level must be maintained at least 3” (7.62cm) below the skimmer opening throughout the winter. Surplus water must be removed by pumping, draining or siphoning so that it doesn’t enter the skimmer during the winter. **Remove all hoses attached to the skimmer and return fittings. The opening at the bottom of the skimmer MUST be kept open so that accumulated water can drain immediately.**

**Pools with 12” (30cm) skimmers:**
In addition to the above, the Pool Winterizing Kit (Part Number 1370138) must be inserted into the 12” (30cm) skimmer (see illustration below)

Failure to install the “Pool Winterizing Kit” and follow the winterizing procedure, in accordance with these instructions, may void the pool warranty.

The Pool Winterizing Kit (Part Number 1370138) is also available from your pool dealer.

**All Pools:**
Do not attach the pool cover to the top ledge, connectors or any part of the skimmer.

Insert the Pool Winterizing Kit (Part Number 1370138) into the skimmer until it fits flush with the skimmer flange. On some skimmers, it may be necessary to trim the foam to make a friction fit and/or use a wooden wedge to keep it in place during the winter.
Assembling the Pool Base

A. Assemble your Pool Base

1. Lay out the Base Plates and Bottom Rails
   a. Place the base plates equally spaced around the perimeter of your foundation. If you are using the optional patio stones, place one base plate on each stone.
   a. Slide the curved bottom rails together with the base plates. Leave a 1/2" (13mm) gap between the ends of the bottom rails.

2. Spread out Brick Sand/Stabilizer
   a. Spread a layer of fine brick sand (no pebbles) over the foundation area, 2" (5 cm) deep. Use a rake to make the brick sand flat and smooth.

Note:
If you want, instead of using patio stones you can make crushed limestone pads. Dig a 12" x 12" (30 x 30 cm) square hole 2" (5 cm) deep and fill the hole with stabilizer, packing it down hard. Spray with water as you pack it down.

Hint:
Bend the first 1/8" (3 mm) of the end of the bottom rail slightly with a pair of pliers to make sure the rail doesn't slide out of the base plate when the pool wall is installed.

Remember:
Spread stabilizer out over the entire pool foundation area inside the base rails. This provides a protective surface for the pool liner to rest on.
Assembling the Pool Wall & Liner

A. Assemble your Pool Wall

This section is for Round and Oval pools (Round pools are shown).

1. Set the Pool Wall in place

   a. Wait for a calm day. **Do not** attempt to install the pool wall in the wind.

   b. Unpackage the coiled pool wall and stand it on a piece of cardboard or plywood at the centre of the pool. The cut-outs for the through-the-wall skimmer should be towards the top of the wall. Look for a "**THIS WAY UP**" label and arrow.

   c. Start uncoiling the wall, guiding the bottom edge into the curved bottom rail. The starting end of the wall must be positioned **over a base plate**, and the skimmer and return holes should be positioned where the pump and filter will be.

   d. Set lengths of the omega stabilizer onto the top edge of the wall as you uncoil it and join the omega stabilizer with connectors as you go, leaving a 1/2" (13 mm) gap between each. **Make sure** the gap is directly above the base plate (this applies to round pools, oval pools and Gibraltar Style pools). (If you have a **beaded pool liner**, set lengths of **liner retainer** on the top edge of the wall first, then the omega stabilizer and connectors.)
2. Join the Ends of the Pool Wall

a. Line up the holes in the two ends of the pool wall.

b. To line up the holes, make the circle bigger or smaller by nudging the base plates in or out with your foot.

c. To fasten the wall joint, overlap the two steel bars, one on the inside and the other on the outside. Tighten the mechanical screws on the inside and the nuts on the outside.

d. Ensure that all bolts and all the holes are used.

e. Cover the seam and bolt heads on the inside of the pool wall completely with three layers of 2" (50mm) duct tape.

Hint:
Stick a screwdriver through two of the holes to help line up the ends of the wall.

Remember:
The bolt heads must be toward the inside of the pool. Cover the bolt heads with duct tape.
3. Make sure the Pool Wall is Level
   a. Use a length of string and a line-level to check across the top edge of the pool wall to see if it is level. Check the wall in several different directions. The wall must be level. If the level is off by more than 1" (25 mm) across the diameter of the pool, take the wall apart and level the foundation again.

4. Make sure the Pool Wall is Round
   a. Using a tape measure, measure across the circle at each base plate. The pool wall must be round within 1" (25 mm) (all of the measurements must be within 1" (25 mm) of each other). Adjust the circle by nudging the base plates in or out with your foot.
   b. Adjusting the pool to the proper shape may cause the bottom rails and base plates to slip out of alignment a little. Recheck all of the base plates to make sure each one is centred where the base rails meet.

5. Make a Cove
   a. You are ready to prepare the cove. The cove is a small slope around the inner wall circumference of the pool which will prevent the liner from slipping under the wall. You can use stabilizer, or preferably, polypropylene pieces designed for this purpose.
b. If you are using stabilizer, pack it around the wall to form a cove of about 15cm high and 15cm wide at ground level. Wet the sand to pack it and use a trowel to spread it evenly.

c. Wet the sand on the floor of the pool to smooth it. Pack it using a manual compactor.

d. If you are using polypropylene pieces, insert them in the lower wall channels of the pool.

B. Install your Pool Liner

1. Set the liner in place
   a. Open the carton. Do not use anything sharp to open the carton.
   b. Unpack and unfold the liner and spread it out in the sun to warm it up. Inspect all the seams and surfaces for holes.
   c. Spread out the liner, smooth side down. The curved seam should be centred on the cove at the base of the wall. The other seams will form straight lines across the bottom of the pool.
   d. Smooth out all the wrinkles in the bottom.

2. Fasten the Liner in place (Overlap Liner only)
   This step applies only if you have an Overlap Liner. See the next page if you have a Beaded Liner or V-Bead Liner.
   a. Lift the sides of the liner and drape them over the top of the pool wall. If you have a 52” (132 cm) high pool, pull the liner up until there is 2” (5 cm) overhang; if you have a 48” (122 cm) high pool, pull the liner up until there is 6” (15 cm) overhang.
No Diving or Jumping. Observe all Safety Rules.

3. Trim the Plastic Coping and Roll Up the Excess Liner
a. After all the wrinkles in the liner are removed, trim any extra length of plastic coping so there is no overlap.

b. Roll up any excess liner hanging below the plastic coping and tape it in place near the top of the pool wall. Important: Do not trim off the excess liner.

4. Fasten the Liner in place (Beaded Liner only)
This step applies only if you have a Beaded Liner. See the previous page if you have an Overlap Liner or below if you have a V-Bead Liner.

a. Lift the sides of the liner and insert the beaded edge into the liner retainer on the top edge of the pool wall.

b. Start filling the pool with water. As the pool fills, work out all the wrinkles and smooth the liner to the wall.

5. Fasten the Liner in place (V-Bead Liner only)
This step applies only if you have a V-Bead Liner. See steps 2 and 3 if you have an Overlap Liner, or step 4 if you have a Beaded Liner.

a. Remove the omega stabilizer and connectors from the top edge of the pool wall. Important: do not remove all of the omega stabilizer at once; remove only two lengths of the omega stabilizer at a time.

b. Hook the V-bead over the edge of the pool wall.
c. The space between the ends of the omega stabilizer at the tops of the locations where the uprights will be attached, should be about 1/2" (13 mm).

d. Replace the two lengths of the omega stabilizer and connectors.

e. Repeat steps (a) to (d) until you have gone around the entire pool and finished attaching the pool liner in place.

f. Start filling the pool with water. As the pool fills, work out all the wrinkles and smooth the liner to the wall.

6. Proceed to Section 4
   a. Continue with Section 4 to finish assembling your pool.
A. Attach your Uprights and Top Ledges

1. Continue filling your Pool
   a. Continue filling your pool with water. Do not put in more than 12” (30 cm) of water until the top ledges and vertical uprights are all attached.
   b. Keep working on the top ledges and uprights while the pool fills.

   • See the drawing on the next page for an overview of all the parts used to install the uprights, top ledges and ledge covers.

2. Install the Uprights
   a. Line up the bottom of one upright (key 1) with the two small tabs on one base plate (key 2). The tabs must be on the inside of the upright.
   b. Line up the screw holes and fasten with one self-tapping screw on each side (key 3).
   c. Hook a top plate (key 4) over the top edge of the pool wall (key 5). Place the top plate down over the top of the upright with the tabs on the inside of the upright. Make sure the upright is straight up and down.
   d. Line up the screw holes and fasten with one self-tapping screw on each side and one on the front (key 6).
   e. Repeat the last four steps for each of the uprights around the pool wall.

Hint: Use the ridges in the pool wall to make sure the upright is straight up and down.
Overview of Upright, Top Ledge and Ledge Cover Assembly

No Diving or Jumping. Observe all Safety Rules.
3. Install the Top Ledges
   a. Place a top ledge (key 7) with one end on top of the top plate. The side of the top ledge facing the centre of the pool should be close to the pool liner and pool wall. The side of the top ledge facing the outside of the pool will form a large overhang.
   b. Line up the holes as shown. Fasten through the two oval holes to the top plate below with two self-tapping screws (key 8). Do not tighten the screws yet. Leave the screws slightly loose until all the top ledges are in place.
   c. Repeat the last two steps for the other end of the top ledge.
   d. Repeat steps (a) to (c) to install the rest of the top ledges around the top of the pool wall.
   e. Make the pool settle into a perfect circle by pushing the top of the pool wall vigorously inward at each upright (this will help make the bottom of the pool wall shift into a perfect circle).
   f. Adjust all the top ledges to line up evenly with each other and tighten all the screws.

4. Install the Ledge Covers
   a. Loosen the front screw used to secure the top plate to the upright.
   b. Place a bottom ledge cover against an upright as shown in diagram 1.
   c. Slide the bottom ledge cover upwards until the slot on the ledge cover rests under the screw.
   d. Tighten the screw and repeat for the other uprights.
   e. Coat all showing screw heads with clear outdoor varnish.

Caution:
Before anyone uses your pool, read and follow all the Safety Rules in Section 1. This pool is not for diving or jumping.

Important:
The pool wall may bulge and shift a little while filling with water. This is normal.

B. Fill your Pool with Water

1. Finish filling the pool
   a. Fill the pool with water to 2\" (5 cm) below the lowest opening. Next, follow the installation instructions for your skimmer.