



POOL ASSEMBLY AND INSTALLATION INSTRUCTIONS

ROUND POOLS

THINK "SAFETY FIRST"

Safe and correct use of your new pool means swimming and wading only. DO NOT DIVE OR JUMP! The above-ground pool is not designed for these activities!

INSTALLATION

Installation of a Hoffinger pool is not very hard, but it is a big job. The job will be easier if two or three friends help with the installation. Follow all instructions exactly. Your pool warranty is void if pool assembly and installation instructions are not followed 100%. Read all instructions provided with accessories such as filter, pump, skimmer, etc. prior to starting.

Plan 3-5 days for pool assembly and installation. Avoid windy days. Before you start, check to see that you have the correct number of parts. Use your Parts List, which is broken down by carton. Do not throw away any of the inspection slips or cartons until you are sure you have all the parts. Your dealer will promptly replace any missing parts.

The warranty is void if the design of the pool is altered in any way. No changes may be made to any of the parts. The pool must be assembled according to Hoffinger's instructions. You must be completely satisfied with the completed pool installation, whether self-installed or professionally installed, before proceeding with additional landscaping.

CONTRACT INSTALLATION

Hoffinger Industries, Inc. is in no way affiliated with any professional pool installer. Therefore, Hoffinger can assume no responsibility for errors in installation by the homeowner or said professional installer. If you have the pool installed by others, please supervise to be sure they comply with proper installation techniques as shown.

LOCAL CODES

Check to see if building permits or utility clearances are required (for example - National BOCA Code requires the pool to be a minimum of six feet from the property line and a minimum of ten feet from the street). Obey all safety codes for fencing and all electrical codes.

SPECIAL CARE

Hoffinger pools are designed to exceed industry recommended safety factors. However, special care must be taken with certain installation procedures that the installer performs and controls.

1) **Framework must be level** - Referring to "Installation Cautions" shown at right, six pool installations illustrate improper methods of installation or errors during the leveling of the ground (Step 1) or positioning of the patio blocks (Step 2). The entire pool framework must sit on flat (level) ground. An out-of-level condition will produce stresses in the pool structure and/or deformities in the wall that could cause pool wall failure.

2) **Wall joint and joint piece** - This is where the wall joints together. Damage to the wall joint or joint piece reduces the safety factor and can result in a weak installation. Follow instructions using extreme care.

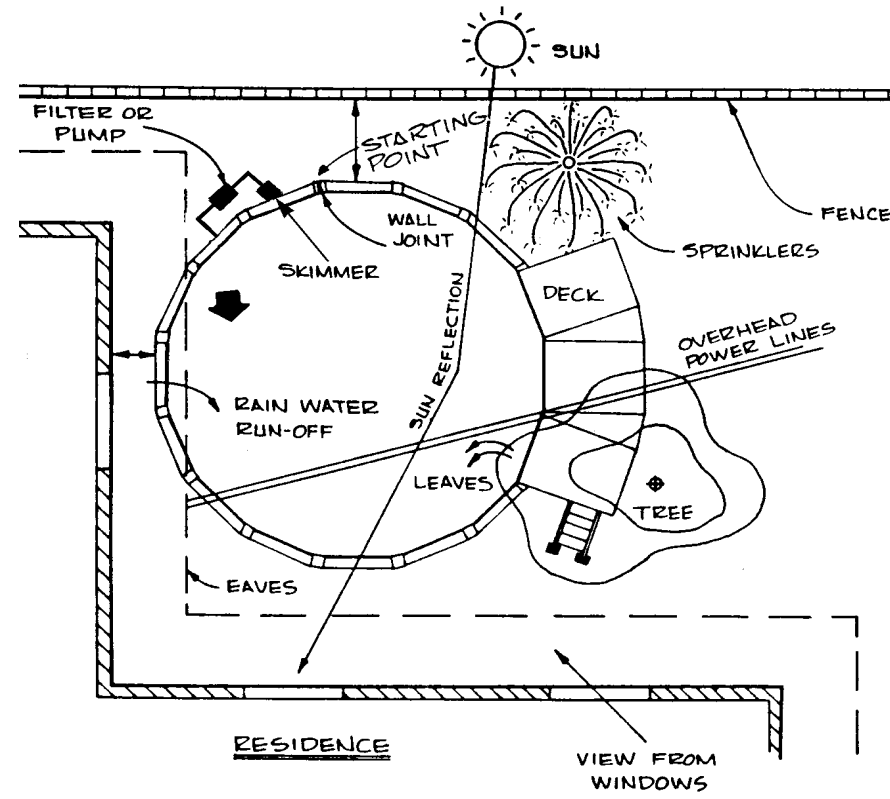
3) **Cove** - The cove keeps the liner from creeping out from under the pool wall. Follow instructions to the letter. Don't short-cut or substitute materials. Do not use materials that will shift. Improperly installed pools can rupture, allowing thousands of gallons of water to rush out and cause extensive property damage and personal injury.

4) **Set up pool on soil surface**. Hoffinger pools are not designed to be buried. Outside ground forces can collapse the pool wall.

HOW TO USE THESE INSTRUCTIONS

These installation instructions are used in conjunction with your pool parts list for identifying parts as referred to in each step.

PRELIMINARY PLANNING



IMPORTANT: Before beginning your pool installation, take a few minutes to consider the following points:

1. Check wall clearances to allow enough working area for your pool installation.
2. Check for easements.
3. Avoid trees and roots; do not allow leaves to fall into the pool.
4. Avoid overhead power lines.
5. Avoid underground piping and cables.
6. Keep sprinklers away from pool sides.
7. Select a pool site that allows for the proper supervision of swimmers as well as viewing children near the pool.
8. Position the pump and filter near convenient electrical outlets.
9. Avoid overhanging eaves to prevent water and debris runoff from your roof.
10. Allow 12 inches of undisturbed soil around your pool (clearance radius).
11. No sudden slopes within 6 feet of your pool.
12. Do not install your pool on any abrasive area such as concrete, asphalt, peat moss, tar paper, gravel, wood, top of grass or on soil which has recently undergone petroleum based chemical treatments.
13. Treat the ground inside the pool area with a non-petroleum based fungicide (available at garden supply shops). This may help prevent fungus stains on the liner. Consult your pool dealer.
14. Do not install liner on rut grass or Bermuda grass. See your dealer for special instructions.
15. Rid pool area of burrowing pests and insects such as gophers and termites.
16. Avoid windy days during installation.
17. Have 2 or 3 helpers to assist you during pool assembly.

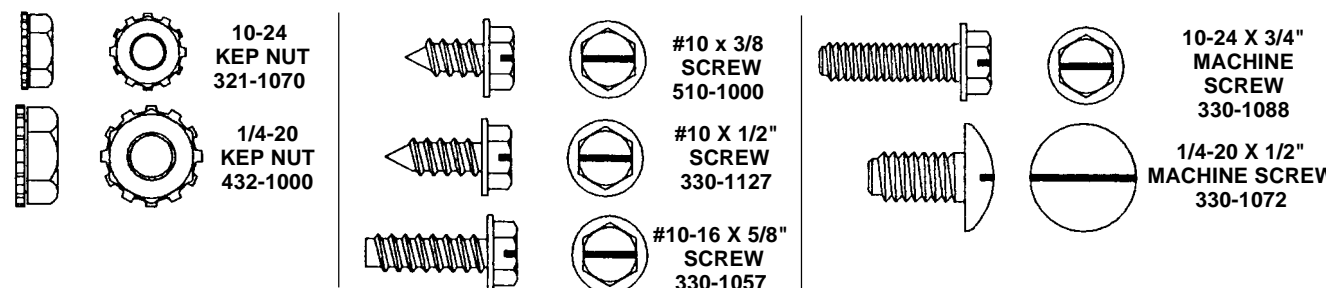
TOOLS AND MATERIALS REQUIRED

- Materials Needed -**
- Nails - 2 1/2" Long (1 Doz.)
 - 12" x 12" x 2" patio blocks (Optional) - one per vertical
 - Ball of heavy string
 - Binder clips - 1 1/4" - 2" size (Available at stationary supply stores) - two per top rail
 - 2" x 4" board (See Step 1 for length)
 - Duct tape (2" wide)
 - Wood stake - 2" x 2" x 18"
 - Pool coving (See Step 9)
 - 2" Carpenter's level (Transit recommended)
 - Hammer
 - Flat end shovel
 - 5/16" Hex nut driver
 - 25' Tape measure
 - Garden rake
 - Tamping tool
 - Roller (if available)
 - Screwdriver, flat end (Large)
 - 2 or 3 Garden hoses (Fill pool)
 - Felt tip marking pen
 - Carpenters saw
 - Sifting screen (To remove 1/8" pebbles and larger)
 - Sharp knife or single edge razor blade
 - Drill/Bit (See Step 1)

- Tools Required**
- 1/4" Drive ratchet with 3" extension (For the supplied 5/16" magnetic socket) - resin pools only

POOL FASTENER IDENTIFICATION

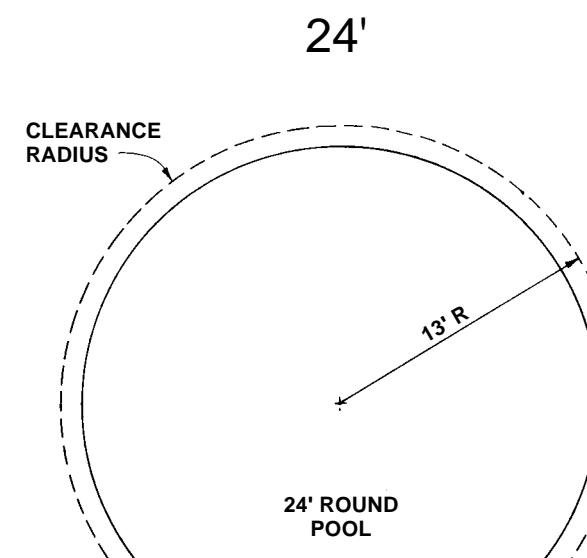
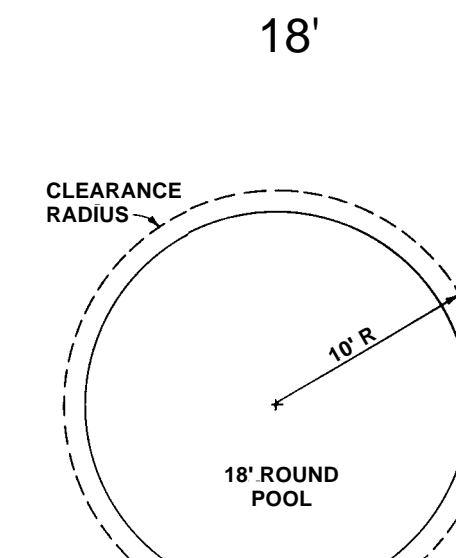
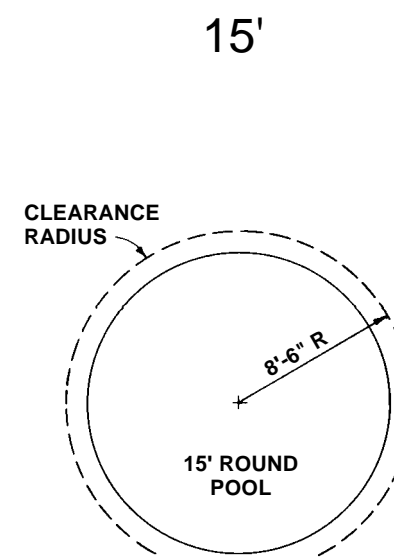
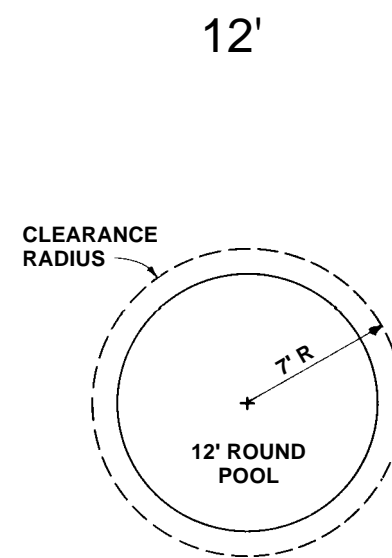
Your pool assembly may not require all the fasteners shown below. Refer to your Pool Parts list for the fasteners required to assemble your pool.



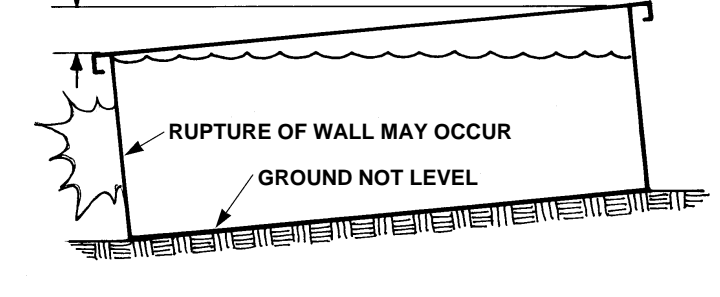
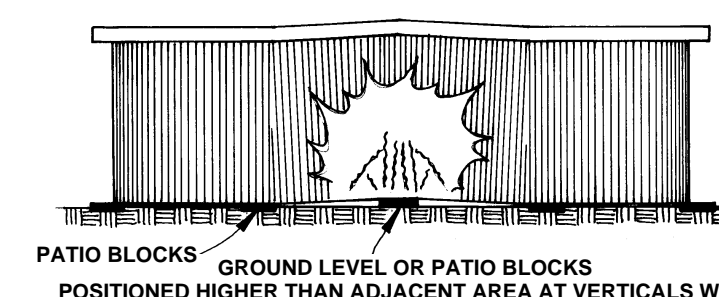
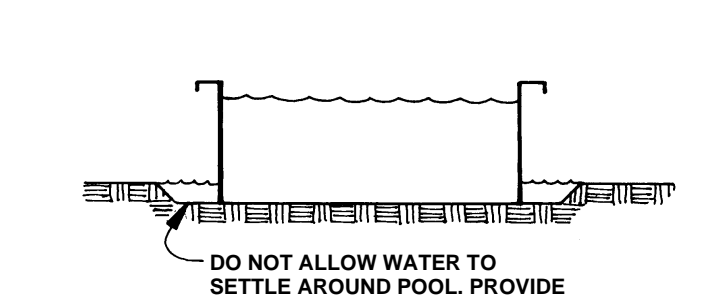
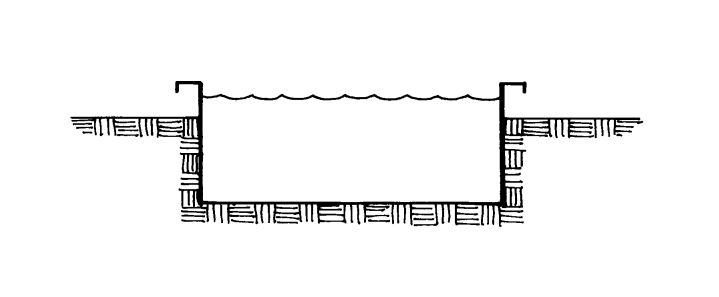
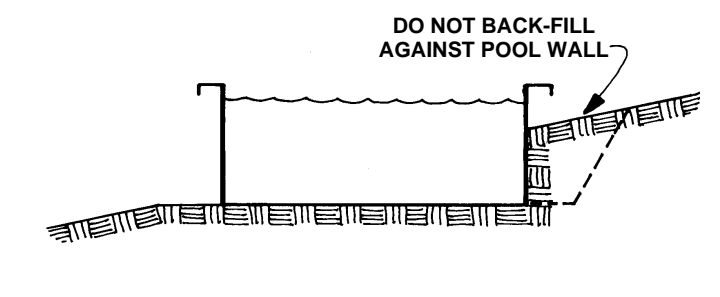
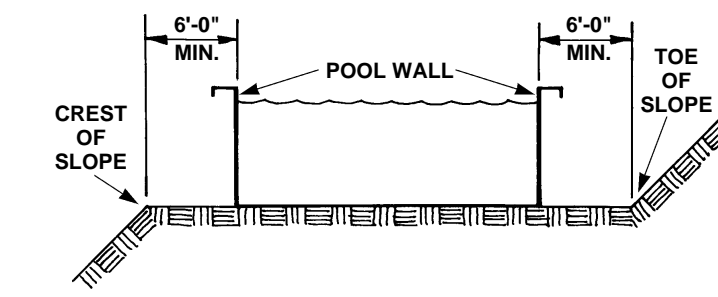
NOTE: All fasteners shown at actual size.

POOL LAYOUT DIMENSIONS

Numbers across the top represent the various diameters of Hoffinger above ground family pools. Below each size is a plan of that pool with a clearance radius (dash lines) which is required for external pool parts. Be sure to read "Preliminary Planning Installation Cautions" before starting installation.



INSTALLATION CAUTIONS



INSTALLATION NEAR SLOPES

A pool filled with water weighs many tons. If pool is installed too close to the "Crest" of a slope, the pool/water weight could cause the ground to give way. The pool can rupture, allowing thousands of gallons of water to rush out and cause extensive property damage and personal injury. Consult with local building department. If pool is installed too close to the "Toe" of a slope, outside collapsing ground forces can collapse the pool wall.

DO NOT BACKFILL AGAINST POOL WALL

Back-filling against the pool wall can cause outside ground forces to collapse the pool. Some soils are highly aggressive and will corrode the pool components, resulting in pool failure. Keep pool exterior clear of soils and other materials around its entire perimeter. Provide good drainage away from pool.

DO NOT BURY POOL

Burying a pool in the ground above the bottom rails will cause aggressive soils to corrode the pool components. Deep burial of pool into the ground can cause outside ground forces to collapse the pool. Pool must be installed on top of the ground with good drainage away from pool.

PROVIDE GOOD DRAINAGE

Prevent run-off rain water and general yard watering from settling against the pool frame and wall to prevent corrosion and unsightly crustation build-up on the pool components. Provide good drainage away from pool.

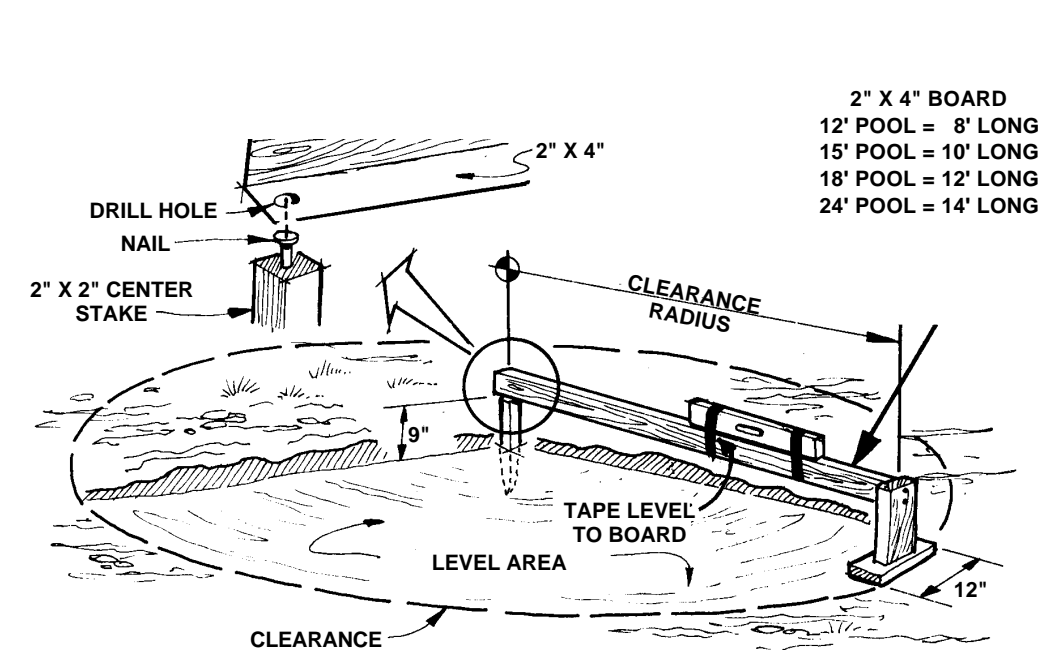
WALL WRINKLING

Prevent wrinkling of the pool wall during installation by checking and rechecking the levelness of the ground and patio blocks (Optional) at each vertical (Step 2). If one patio block is higher than those positioned at each side, wrinkling of the wall will occur when wall is installed.

TILTED POOL

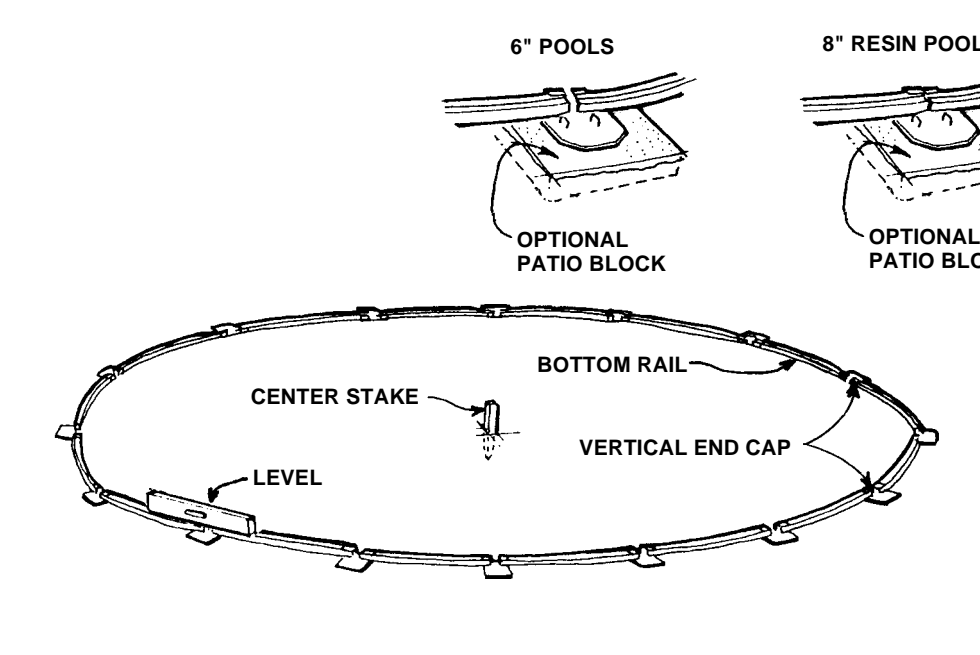
If the ground level slopes in any direction more than 1" from one side to the other or 1" from one end to the other, the wall may rupture causing extensive property damage and personal injury. Follow Step 1 carefully, rechecking levelness of ground before proceeding to next step.

1 POOL LAYOUT & GROUND LEVELING



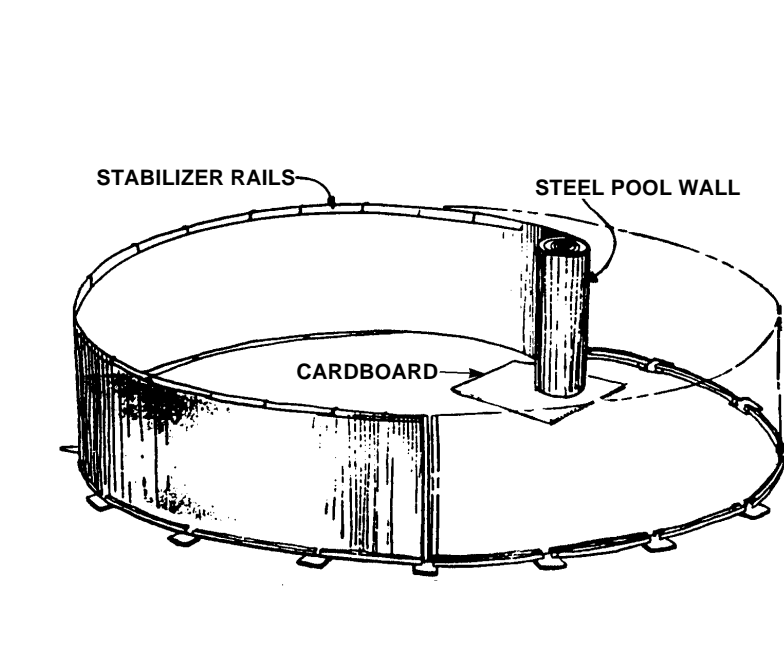
Refer to POOL LAYOUT DIMENSIONS above for your pool diameter. Drive stake into ground at pool center. With a shovel and the constructed depth leveling tool shown above, remove sod and level pool area. Level to the lowest spot within circle. **Remove high points - do not fill in low spots. Ground must always be firm.** Be sure pool area is free of stones, sticks, roots and other objects that could puncture liner. Remember: the entire assembled pool framework must sit on flat ground within 1 inch of level at opposite sides. **Spent additional time now to avoid disassembly later.**

2 POOL RADIUS LAYOUT



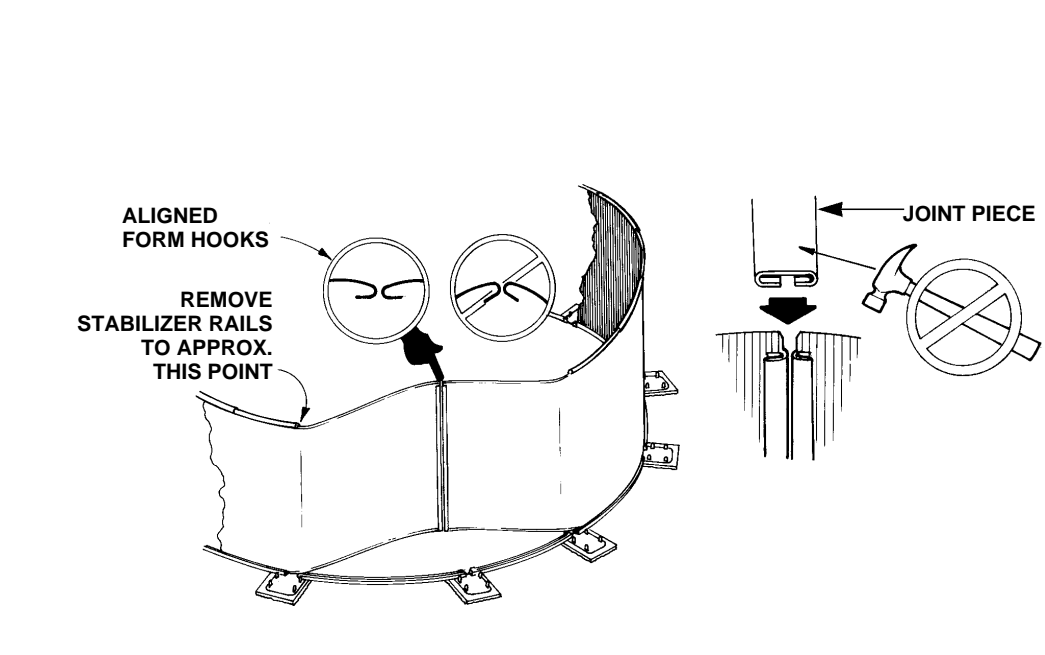
Mark out pool radius, (1/2 pool diameter). Construct bottom framework. Form a circle by sliding bottom rails (groove up) into bottom connector. NOTE: 6" Vertical Pools - Push bottom rails into vertical end cap to the pierced stop. 8" Vertical Pools - Push bottom rails into bottom connector until they meet. Confirm roundness by measuring out to framework from center stake. Confirm levelness by placing level on top of bottom rails. Check around the circle to be sure ground is flat within 1 inch of level at opposite sides. **Patio Block Installation (optional but recommended):** Center 12" x 12" x 2" patio blocks under bottom connector and mark their positions with a stick. Move bottom framework out of your way in sections. Turn patio blocks out next to their marked positions and dig soil in the marked locations away to the depth of the patio block. Patio blocks must sit in solid, undisturbed earth, be flush with the ground, and have no movement when turned back into place. Use leveling tools and/or transit to make sure each block is level and that all blocks are level to each other. NOTE: If you plan to use sifted earth for pool cove (see Step 9) bring it in to pool area at this time. Reinstall bottom framework. Check again for roundness, and to see that bottom connectors are centered on patio blocks. Remove all stakes. NOTE: If you will be installing a maindrain, refer to those instructions BEFORE installing pool sidewall.

3 INSTALL WALL



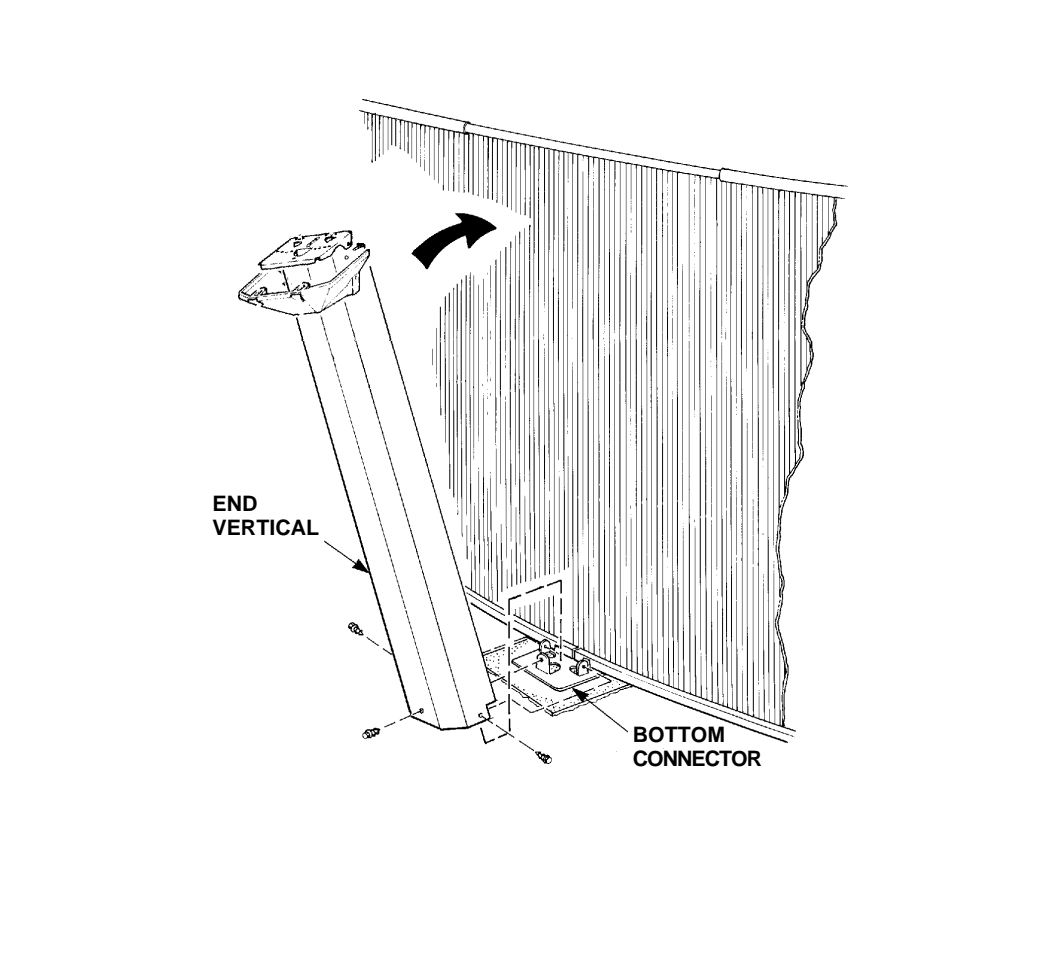
Remove pool wall from carton. Note "Up" arrow on wall. Keep hands and feet from under wall during installation. Determine starting point of wall from PRELIMINARY PLANNING. The skimmer opening will be at the inside end of the wall coil. For improved skimmer operation, position skimmer knockout downwind of prevailing winds. Always start wall at center of a vertical end cap. Uncoil about 6 to 10 feet of wall and insert bottom edge into groove in bottom rails. To help stabilize the wall, place stabilizer rails on top edge of pool wall, working around top of pool as wall is inserted into bottom rails. Telescope small diameter rail into large diameter rail about 6 inches. Secure stabilizer rails to wall with duct tape between vertical end caps.

4 INSTALL WALL JOINT



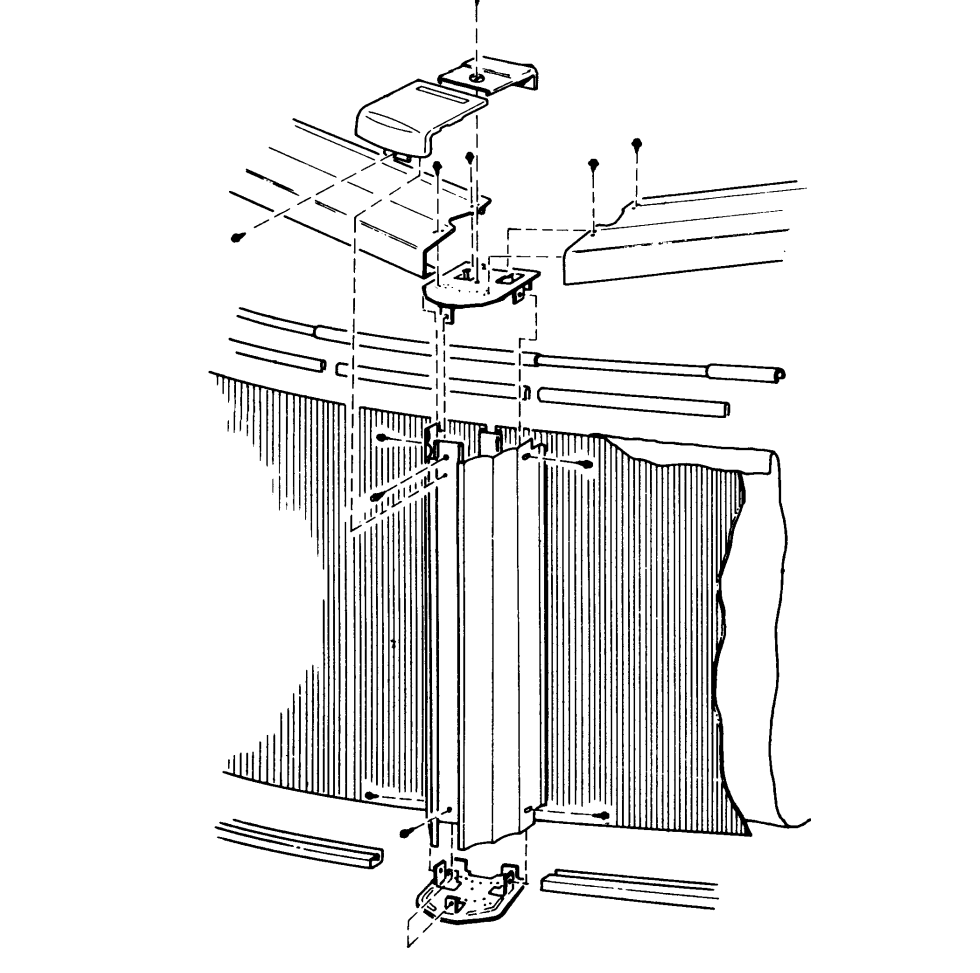
Bring wall ends together in center of vertical end cap. Adjust all bottom rails in or out uniformly if wall ends do not meet. **DO NOT** make the total adjustments with one or two bottom rails. Remove stabilizer rails in area shown above. Bring pool wall ends into contact. Align bottom hooks on wall ends. Align formed hooks on wall ends and slide on joint piece(s) until they are even with top of formed hooks on wall. **WARNING:** Do not hammer joint piece on! Damaged hooks or joint piece can lead to pool wall failure. Manufacturer cannot assume responsibility for performance of this product if the joint piece has been improperly installed by forcing it on in any manner. If joint piece does not slide on easily, realign sidewall hooks. Use ordinary dishwashing liquid for lubrication. When joint piece is in place, replace wall into bottom rails and reinstall stabilizer rails.

5 INSTALL VERTICALS - 8" RESIN POOL



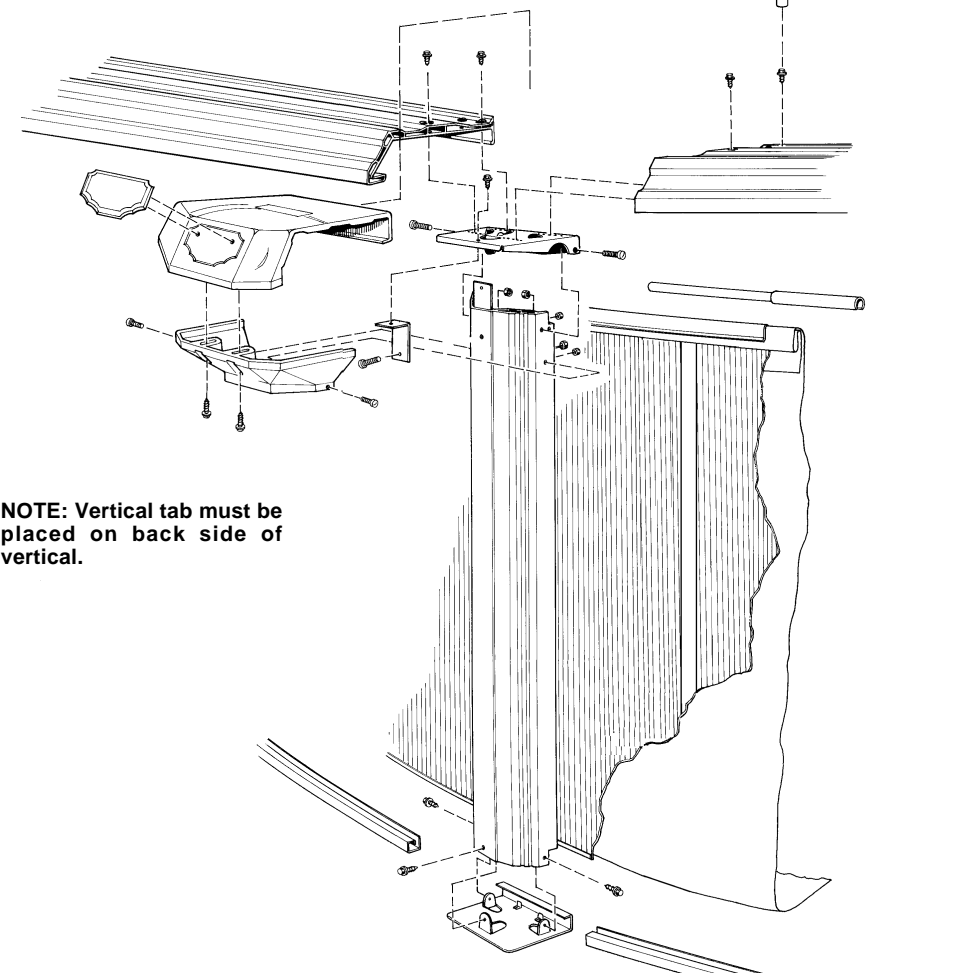
Carefully follow the details shown in Figure B to attach vertical tabs and fencing strips, if required. Then attach vertical end caps and vertical skirts to the verticals using the hardware shown in the parts list. Attach these sub-assemblies to the bottom connectors. Use all necessary hardware. Refer to your pool parts list.

FIG. A 6" VERTICAL



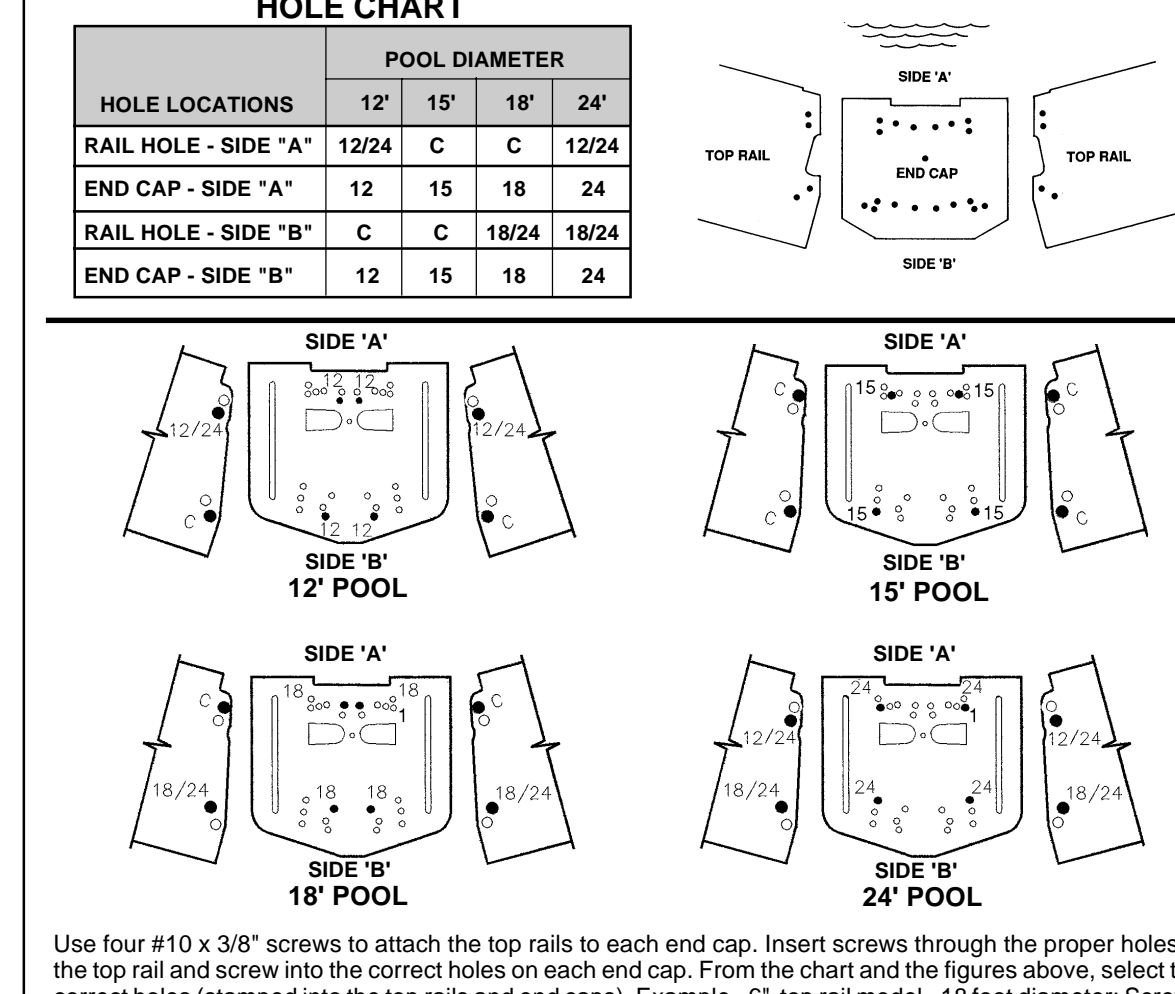
These exploded illustrations of the vertical section are for reference during assembly steps where indicated. Refer to your parts list for part descriptions. NOTE: The two sets of holes on the vertical center skirt must be up.

FIG. B 8" RESIN VERTICAL



NOTE: The tabs on the top and bottom connectors slide inside the double wall opening of the vertical.

6A INSTALL TOP RAILS - 6" POOLS

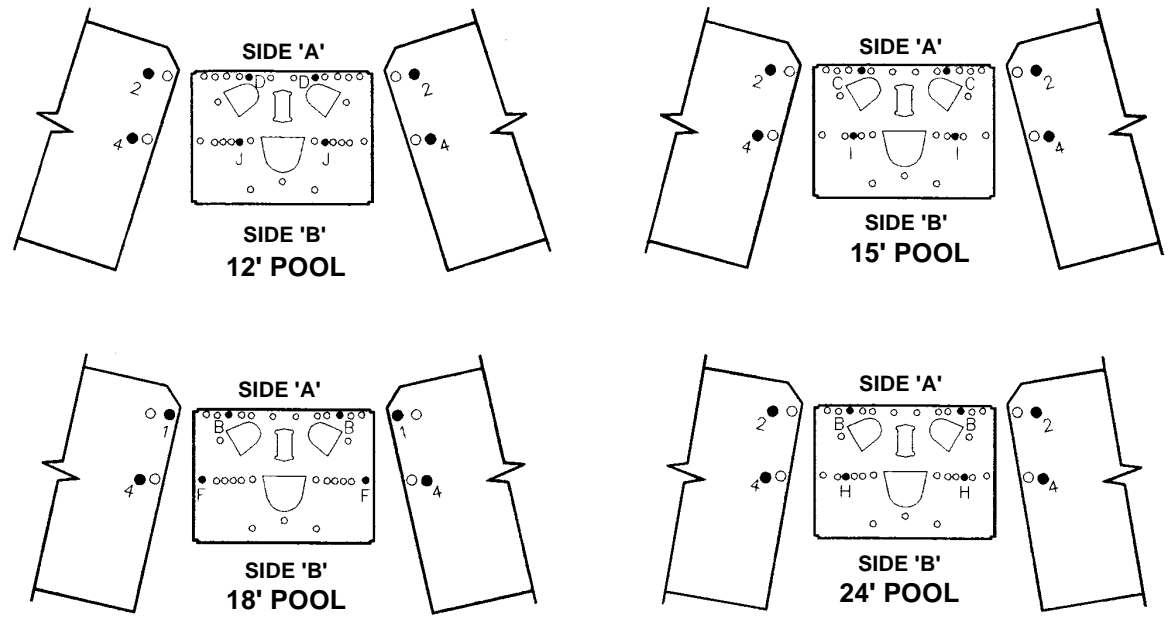


Use four #10 x 3/8" screws to attach the top rails to each end cap. Insert screws through the proper holes in the top rail and screw into the correct holes on each end cap. From the chart and the figures above, select the correct holes (stamped into the top rails and end caps). Example: 6" top rail model - 18 foot diameter. Screws nearest Side A: Insert screw through hole stamped "C" on top rail, and screw into hole stamped "18" on end cap. Screws nearest Side B: Insert screw through hole stamped "18/24" on top rail, and screw into hole stamped "18" on end cap. **HELPFUL TIP:** Use a felt pen to mark all proper holes before attaching the top rails.

6B INSTALL TOP RAILS - 8" RESIN POOLS

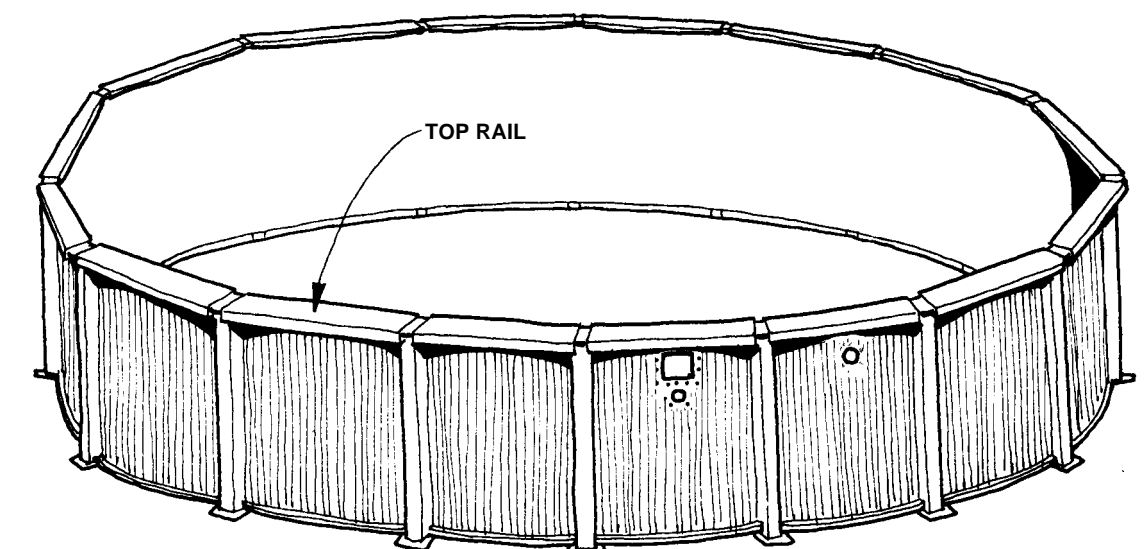
HOLE CHART

| HOLE LOCATIONS | POOL DIAMETER | | | |
|----------------------|---------------|-----|-----|-----|
| | 12' | 15' | 18' | 24' |
| RAIL HOLE - SIDE "A" | 2 | 2 | 1 | 2 |
| END CAP - SIDE "A" | D | C | B | B |
| RAIL HOLE - SIDE "B" | 4 | 4 | 4 | 4 |
| END CAP - SIDE "B" | J | I | F | H |



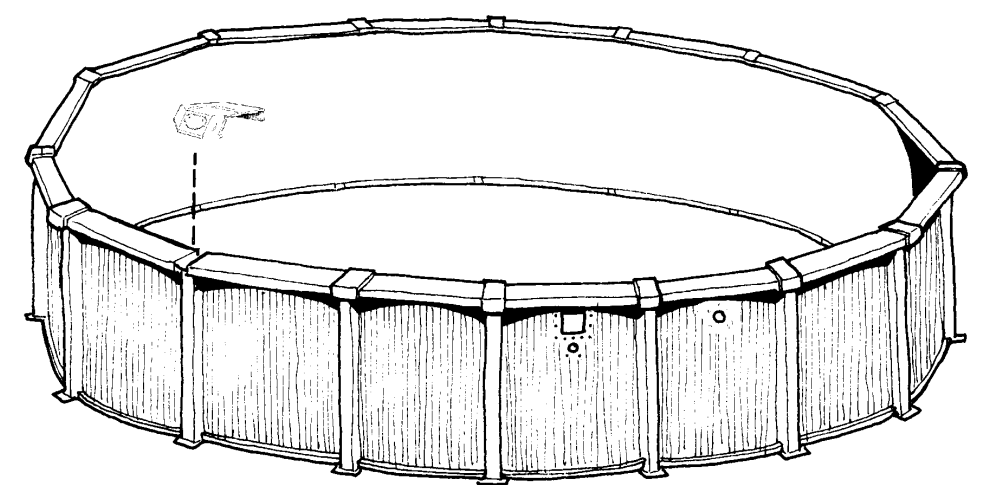
Use four #10 x 3/8" screws to attach the top rails to each end cap. Insert screws through the proper holes in the top rail and screw into the correct holes in the end cap. From the chart and the figures above, select the proper holes (stamped into the top rails and end caps). Example - 8" Resin top rail model - 18 foot diameter: Insert a screw through top rail hole numbered "1" and screw into end cap hole lettered "B". Insert another screw through top rail hole numbered "4" and screw into end cap hole lettered "F".
HELPFUL TIP: Use a felt tip pen to mark all proper holes in the end caps before attaching top rails.
Note: The 8" Resin pool is supplied with a 5/16" magnetic socket for fastening top rails to end caps.

7 RECHECK LEVEL



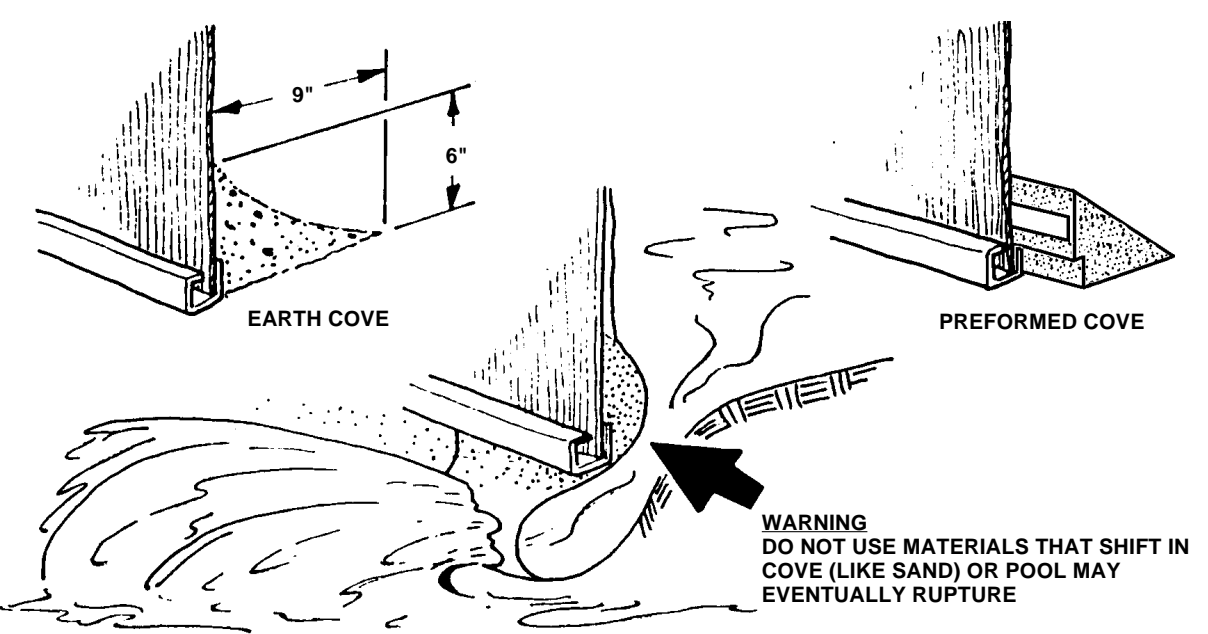
Attach all top rails using the chart from Step 6A or 6B to determine proper holes for attachment. At this time it is extremely important to check the framework to assure level installation. Place the level on each top rail, working gradually around pool, to assure framework is on flat ground with opposite sides no more than 1 inch out of level.
Remember: Always remove dirt to adjust framework - never fill in!

8 ATTACH TOP CONNECTORS



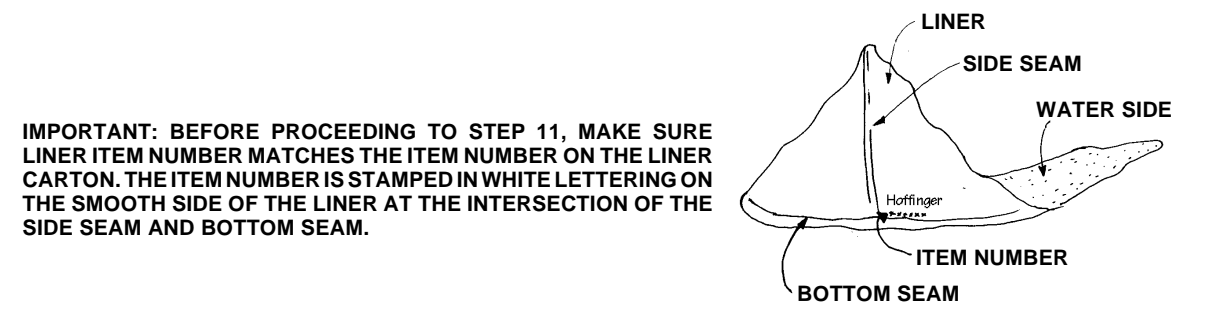
Attach all hardware and brackets shown in the exploded view of your pool parts list. Attach top connectors to pool. Attach the decorative plaque to the top connector (certain models).

9 COVE

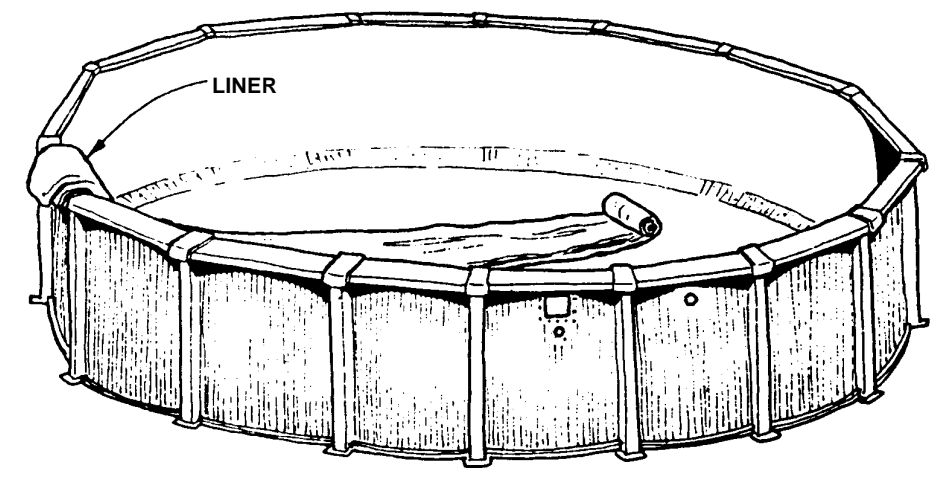


Important Step: The cove is a vital structural element that prevents water pressure from forcing the pool liner out under the bottom rail. The manufacturer will not assume responsibility should the cove be omitted. **EARTH COVE:** Use screened damp earth to form a cove around the inside base of pool wall. Shape and compact firmly. **PRE-FORMED:** Specifically designed pre-formed pool cove is available from your dealer. Follow cove manufacturer's instructions. **Recheck pool for roundness after installing cove.**
WARNING: DO NOT USE MATERIALS THAT SHIFT IN COVE (LIKE SAND) OR POOL MAY EVENTUALLY RUPTURE.

10 LINER SEAM POSITIONING

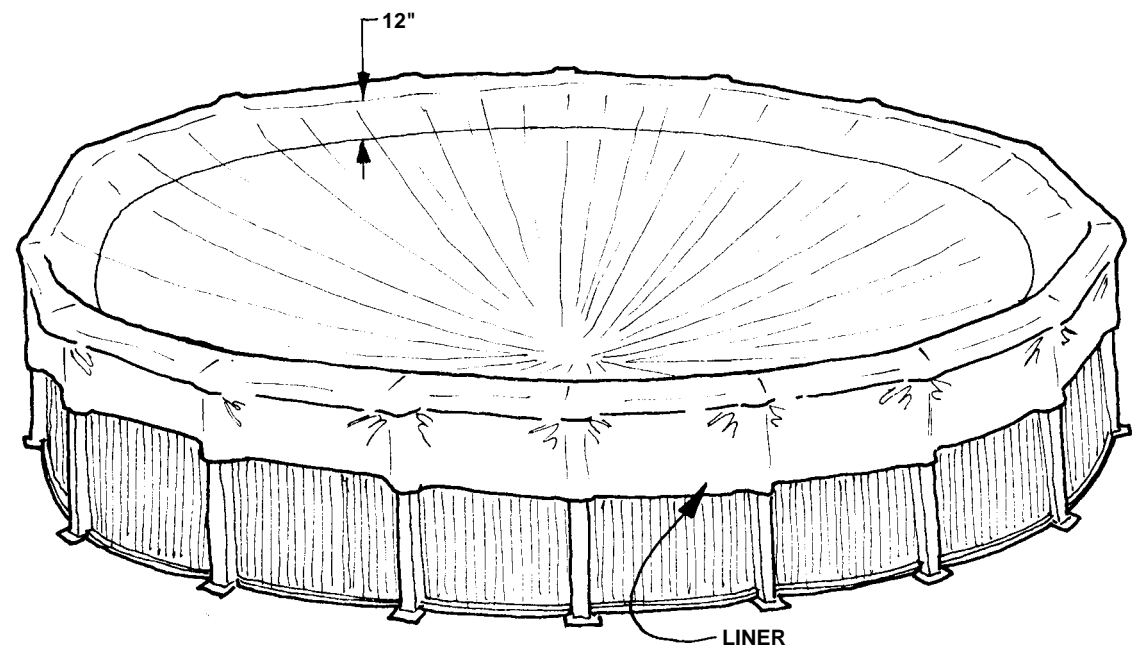


IMPORTANT: BEFORE PROCEEDING TO STEP 11, MAKE SURE LINER ITEM NUMBER MATCHES THE ITEM NUMBER ON THE LINER CARTON. THE ITEM NUMBER IS STAMPED IN WHITE LETTERING ON THE SMOOTH SIDE OF THE LINER AT THE INTERSECTION OF THE SIDE SEAM AND BOTTOM SEAM.



Check the pool floor (area inside pool wall) for levelness. Fill in all slight depressions with sifted earth and tamp. Remove all stones and sharp objects. Fill in all footprints on pool floor. Place liner on top of top rail. The liner should have the loose end overhanging the outside of pool by about 12 inches. Hold end and unroll liner down middle of pool as you would a carpet. Do not place liner side seam over skimmer or return fitting opening. The center seam of the liner must be positioned at the center line of the pool on 12 and 24-foot round pools. For 15 and 18-foot round pools, position the center liner section (not the seam) at the center line of the pool.

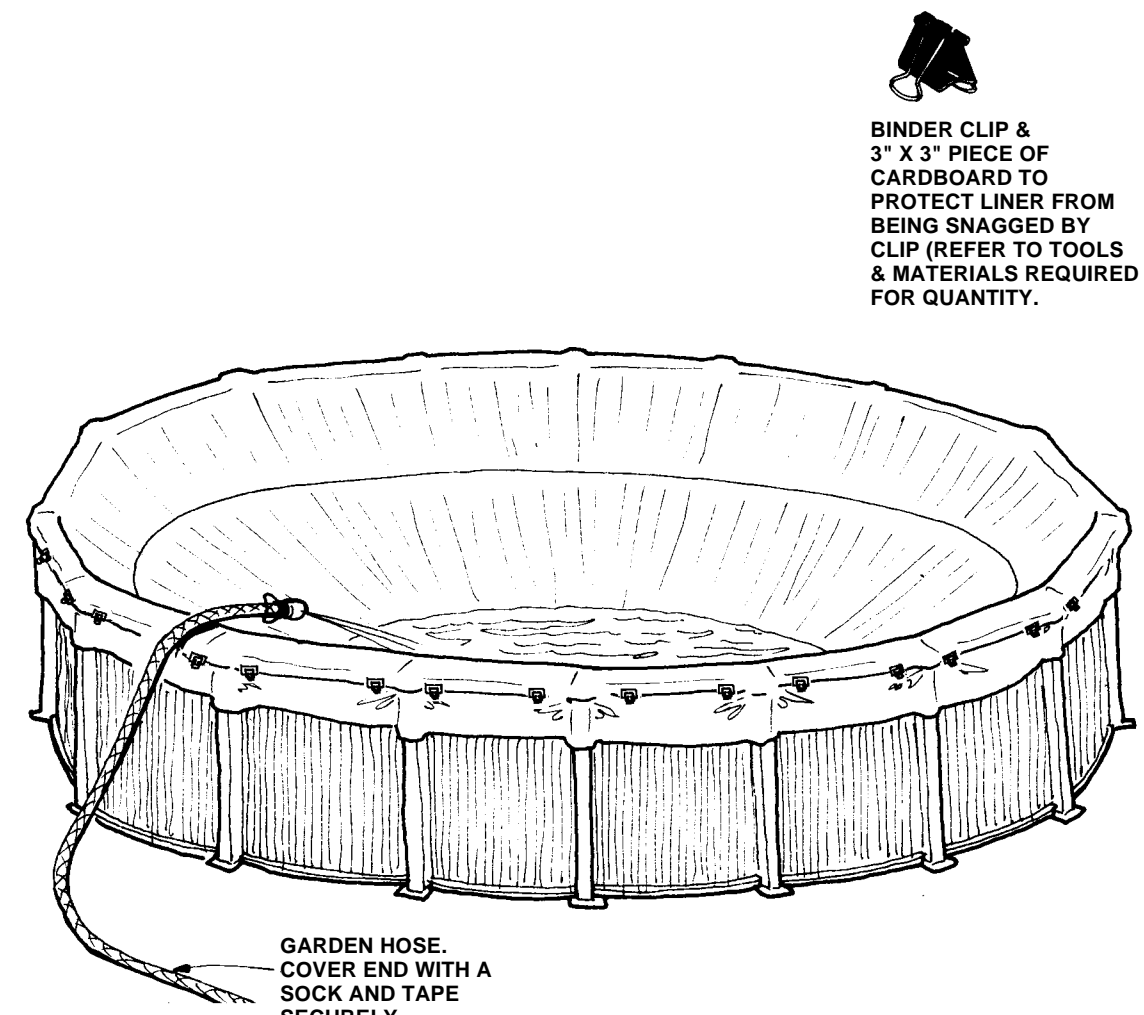
11 INSTALL LINER



Work in both directions from the point where the liner is overhanging. Unfold liner, drape over the top rail and down the sides approximately 24 inches. The liner should be barely above the pool floor in the center ONLY. Remember that the center seam or center section of the liner must be positioned at the center line of the pool. The bottom edge seam of the liner should be inside the pool about 12 inches below the top rails. Correct any bunching or pleating conditions in the liner wall. Inspect liner for open seams. If found, return to dealer for prompt replacement of liner.

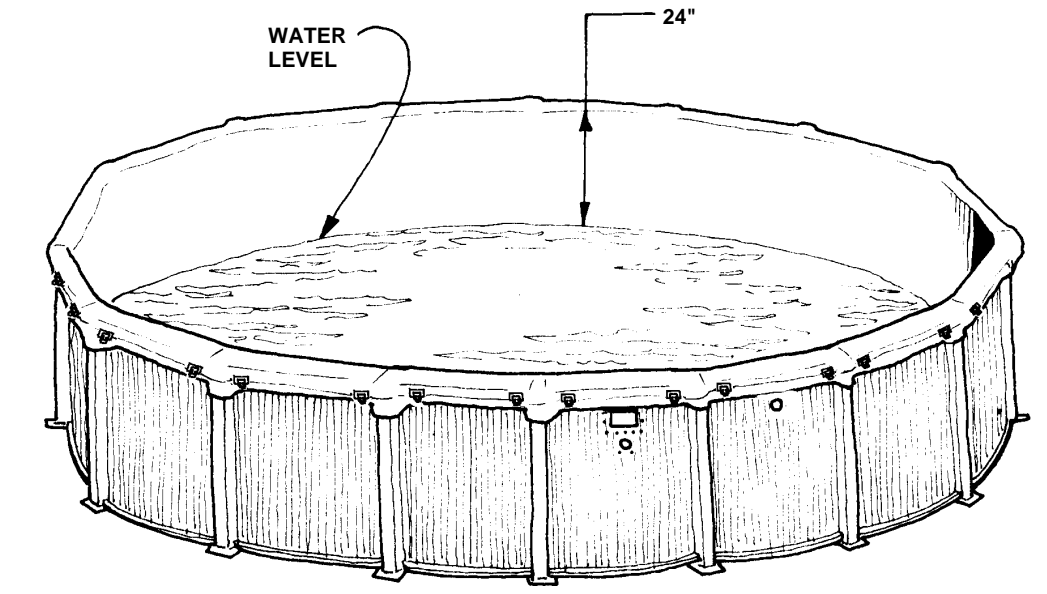
12 FILL POOL

With the liner in position, hold in place by attaching two binder clips over folded cardboard on the underside of each top rail. Carefully cover the end of a garden hose with a sock and tape securely as shown, place it in the pool and begin to fill. As pool fills, the liner will become tight as the water begins to cover the bottom. At this time, check the sidewall for extreme tautness. **Binder clips do not self-release.** Any area that feels tight should be relieved by releasing the binder clips and allowing the liner to feed back into the pool until the desired tautness is achieved. Re-clamp binder clips before you proceed around the pool checking and re-clamping. Remember that you are monitoring a minimum tightness of liner over rail that will control the liner seating itself against the pool floor and up the side. Continue monitoring the liner tension as the water is approaching and covering the cove area of the pool.
 Be sure the liner is evenly distributed over the rail without any bunching or pleating. If this occurs, correct as you are adjusting the liner tension. To correct, grasp the liner wall nearest the wrinkled area. Pull and lift the liner wall just enough to stretch out wrinkles or pleats. It is easier if you wait until there is 1 to 2 inches of water over the wrinkled area before you try to remove it. This allows the weight of the water to hold liner flat on the ground, keeping out wrinkles after you remove them. Pull any excess liner over the rail and re-clamp in position so that a minimum tautness prevents further wrinkling. Double check around the pool so that you have an even tension on the liner wall down to the liner floor. Do not attempt to lift and pull the liner with more than 4 inches of water in the wrinkled area. Damage to the liner may occur.
Cleaning Liner: If you decide to drain the pool to clean the liner, or for any reason, you must leave at least 1 foot (12 inches) of water, measured from ground level up the metal sidewall, in the pool. Failure to comply with this warning may void the warranty.
Liner Replacement: If you decide to replace the liner, you must have the replacement liner at the pool site and ready for immediate installation. DO NOT leave the pool standing without a liner. Do not attempt to install the replacement liner on a windy day. Severe wind damage to your pool may result.



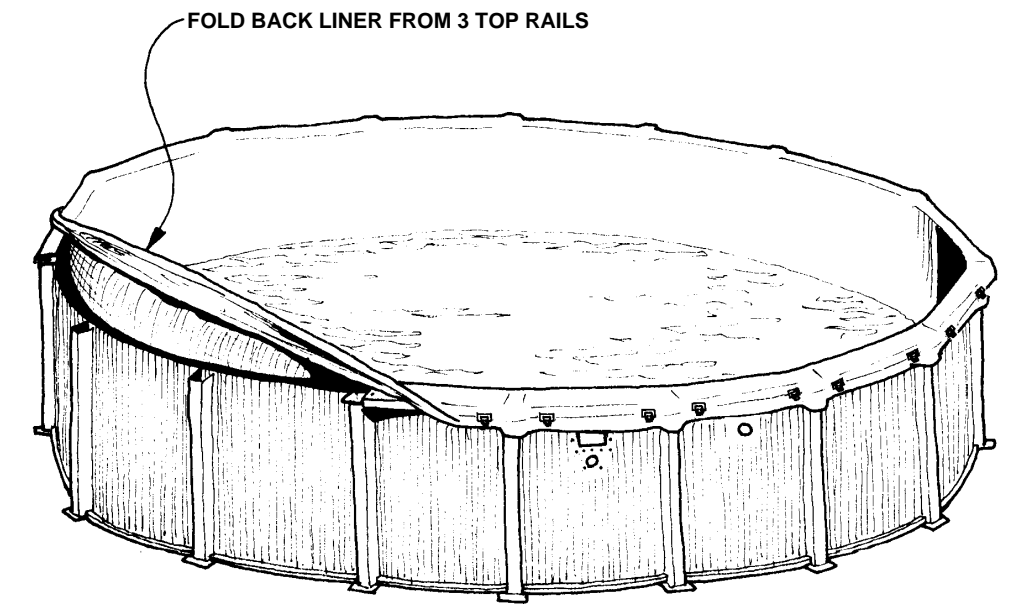
BINDER CLIP & 3" X 3" PIECE OF CARDBOARD TO PROTECT LINER FROM BEING SNAGGED BY CLIP (REFER TO TOOLS & MATERIALS REQUIRED FOR QUANTITY).
GARDEN HOSE COVER END WITH A SOCK AND TAPE SECURELY.

13 CONTINUE FILLING POOL



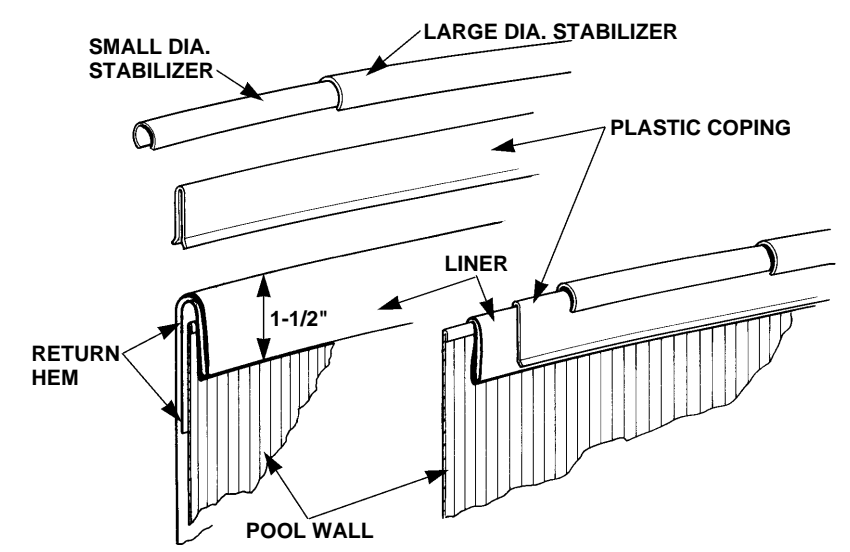
Continue filling pool. **Never allow liner to fall back into pool.** Water between the liner and wall can cause pool failure. When pool has approximately 24 inches of water, stop filling. Do not resume until Steps 14, 15 and 16 are completed. **CAUTION:** Do not cut any openings into liner at this time.

14 PROCEDURE TO ATTACH LINER



With the help of two or three people, raise and hold the liner up from any three top rail sections. Remove four top connectors, three top rails, and stabilizer rails. **NOTE:** 6" Vertical Pool only - remove vertical end caps. **REMEMBER, NEVER ALLOW LINER TO FALL BACK INTO POOL.**

15 INSTALL COPING AND STABILIZER RAILS



Make a return hem as illustrated. **DO NOT** cut off excess liner material as the liner will "slip" from under the plastic coping, causing liner to fall back into the pool. Smooth liner against wall and secure to top of wall with plastic coping. Place stabilizer rails over coping, alternately telescoping small diameter into large diameter about 6 inches as before.

16 FINISH POOL

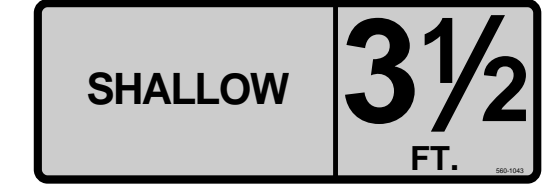
At the skimmer and return openings only, the return hem must be cut away between the steel side wall and the liner side wall. (This will insure that there is only one thickness of liner material covering the skimmer and return openings to affect a positive gasket seal). **DO NOT CUT** the liner side wall at any other location. Replace all parts removed in Step 14. Repeat same steps for entire pool perimeter, working just three top rail sections at a time. **DO NOT** allow liner to fall back into pool.

17 READ ME FIRST BOOKLET



With pool completely assembled, install skimmer, filter, etc. using instructions provided with units.
 Now that you have installed your new pool, Hoffinger would like you to know we are very concerned about your family's safety; so we have provided an assortment of safety literature with your new pool, but it is also a big responsibility. Please take the time to read and understand all the safety literature provided.

18 WARNINGS • LABELS • SIGNS



We have also provided you with an assortment of signs and decals. It is mandatory that you use these signs and decals. We have provided you with a booklet titled "Read Me First," which will give you a detailed description of where and how to apply them. Remember, warnings only help if you put them up. Please help us protect the good health and safety of your family and friends! Read the "Read Me First" book through completely and follow the directions in it. Don't forget to use a marking pen to write the number of a rescue agency on the signs and on the back of your "Read Me First" booklet.

If any of your safety literature, signs or decals become lost or damaged; you can get more free by contacting Hoffinger Industries, Inc. Customer Service Department: Hoffinger Industries, Inc. • 10959 Jersey Blvd., Rancho Cucamonga, CA 91730-5194.

Important! Above-ground pools are designed for swimming and wading only. Do not Dive or Jump! Misuse of your pool may result in crippling injury and/or other dangers to life and health. Do not use slides, diving boards, or any other platform or object which can be used for improper pool entry. Use only an above-ground swimming pool ladder to enter or exit your pool. It is the pool owner's responsibility to secure the pool against unauthorized, unsupervised or unintentional entry. It is also the pool owner's responsibility to warn all pool users of the hazards of diving into shallow water; paralyzing injury may result. Always obey all safety rules. Remember, pool safety is everybody's responsibility.

Change of Design: Hoffinger Industries, Inc. expressly reserves the right to change or modify the design and construction of any product in due course of our manufacturing procedures, without incurring any obligation or liability to furnish or install such changes or modifications on products previously or subsequently sold.

