

DOUGHBOY POOL ASSEMBLY AND INSTALLATION INSTRUCTIONS

CLASSIC 8 1/2" OVAL POOLS

FLARE 7" OVAL POOLS

THINK "SAFETY FIRST"
Sale and correct use of your new Doughboy 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 Doughboy 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 Doughboy's instructions. You must be completely satisfied with the completed pool installation, whether self-installed or professionally installed, before proceeding with additional landscaping.

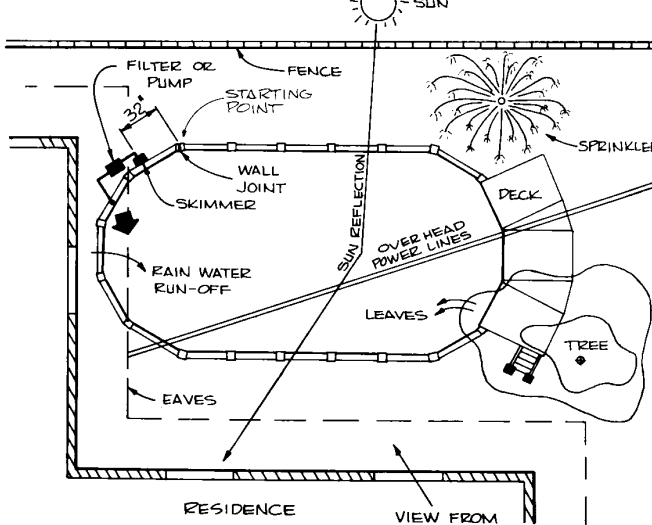
CONTRACT INSTALLATION
Doughboy Recreational is in no way affiliated with any professional pool installer. Therefore, Doughboy cannot assume any responsibility for errors in installation by the homeowner or said professional installer. If you have the pool installed by others, please supervise to be sure they comply with proper installation techniques as shown.

LOCAL CODES
Check to see if building permits or utility clearances are required. Obey all safety codes for fencing and all electrical codes.

SPECIAL CARE
Doughboy pools are designed to exceed industry recommended safety factors. However, special care must be taken with certain installation conditions and controls.

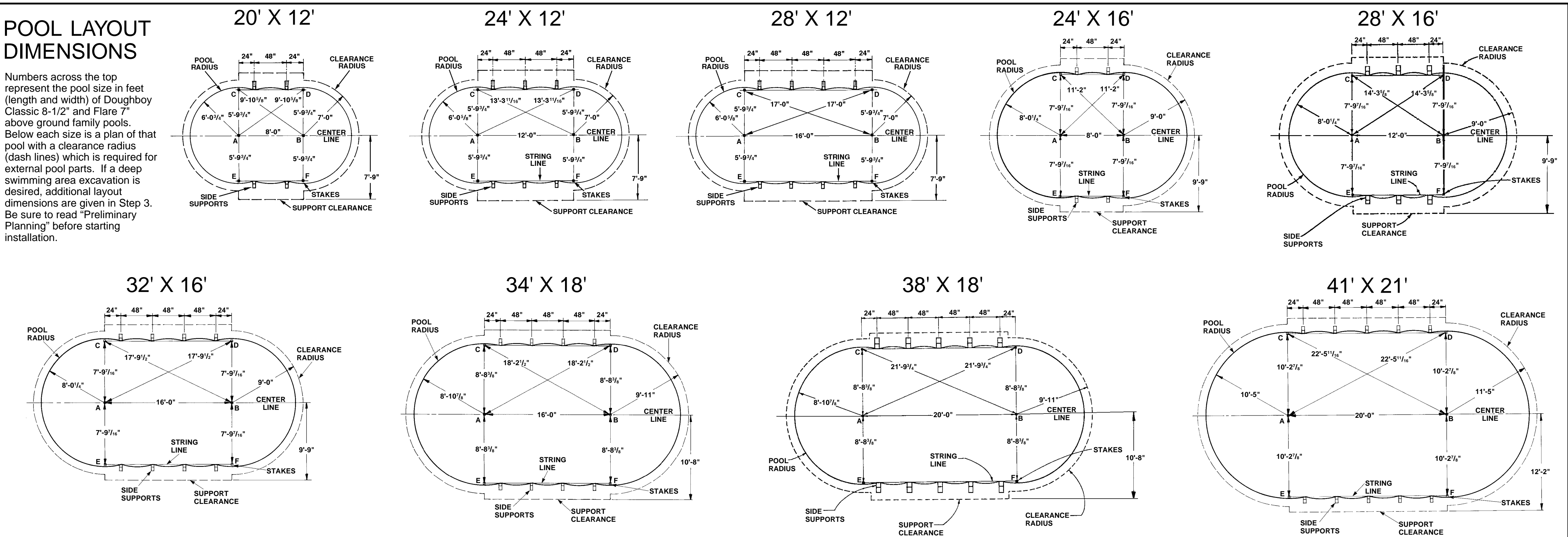
- Framework must be level** - Referring to "Installation Cautions" shown at right, six pool installations illustrate improper methods of installation or errors during the leveling of the ground (Step 2) or positioning of the patio blocks (Step 10). The entire pool framework must sit on flat (level) ground. An out-of-level condition will produce stresses in the pool structure and/or deformities in the wall that could cause pool wall failure.
- 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.
- 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.
- Set up pool on soil surface.** Doughboy pools are not designed to be buried. Outside ground forces can collapse the pool wall.
- External Support** - The excavation and use of 8" x 8" x 16" concrete blocks (Steps 5-8) to reinforce the side supports is a critical structural detail which cannot be varied from instruction. These blocks and the firm undisturbed soil around them become the load bearing components for the forces on the pool sides. **DO NOT** substitute other building materials for the concrete blocks.

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. Your pool can be excavated for a deep swimming area if the liner carton is labeled 20 Mil. or 25 Mil. expandable (see Step 3).

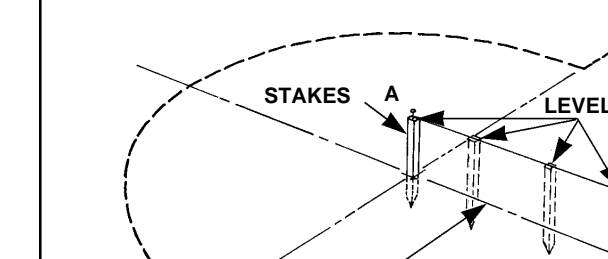
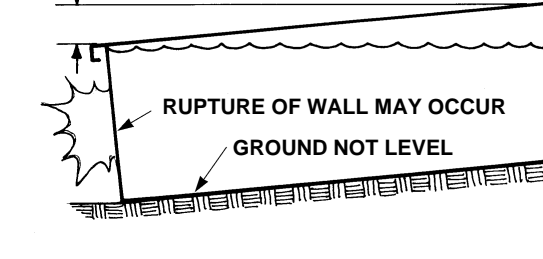
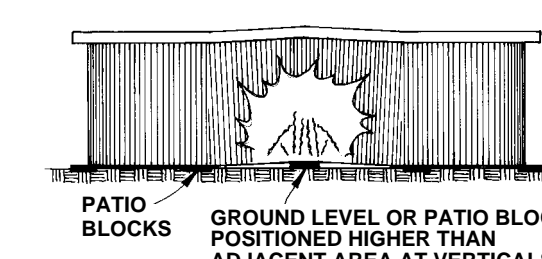
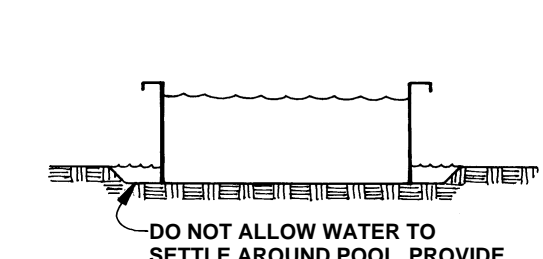
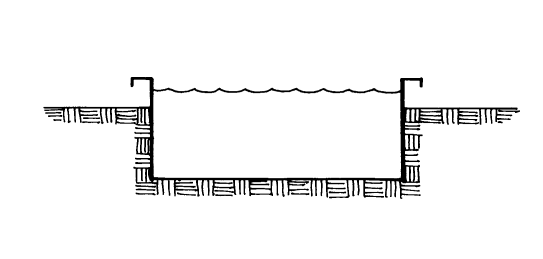
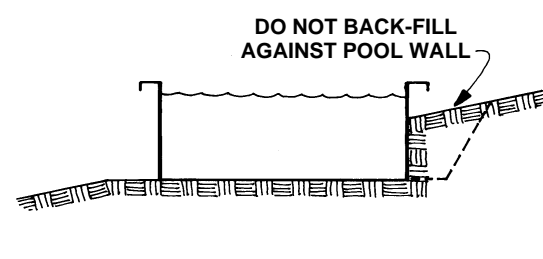
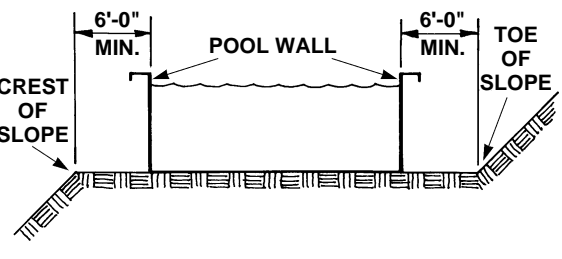


POOL LAYOUT DIMENSIONS

Numbers across the top represent the pool size in feet (length and width) of Doughboy Classic 8-1/2" and Flare 7" 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. If a deep swimming area excavation is desired, additional layout dimensions are given in Step 3. Be sure to read "Preliminary Planning" 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.

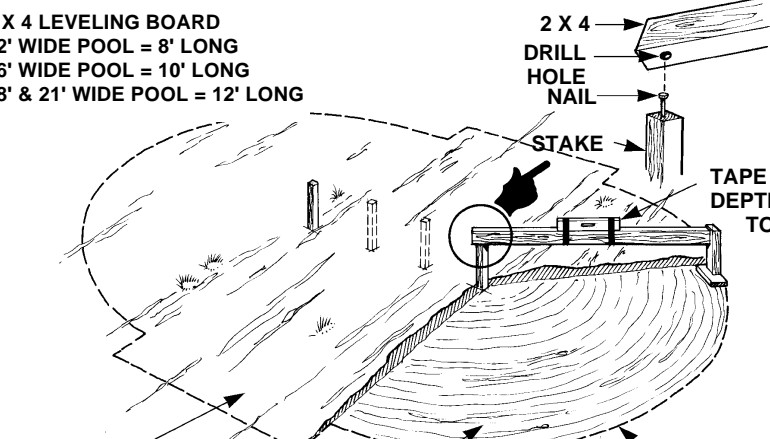
DO NOT BURY POOL
Burying a pool in the ground above the bottom rails will cause aggressive soils to corrode the pool components. Deep burial of pool into the ground can cause outside ground forces to collapse the pool. Pool must be installed on top of the ground with good drainage away from pool.

PROVIDE GOOD DRAINAGE
Prevent run-off rain water and general yard watering from setting 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 (Steps 2 and 10). If one patio block is higher than those positioned at each side, wrinkling of the wall will occur when wall is installed.

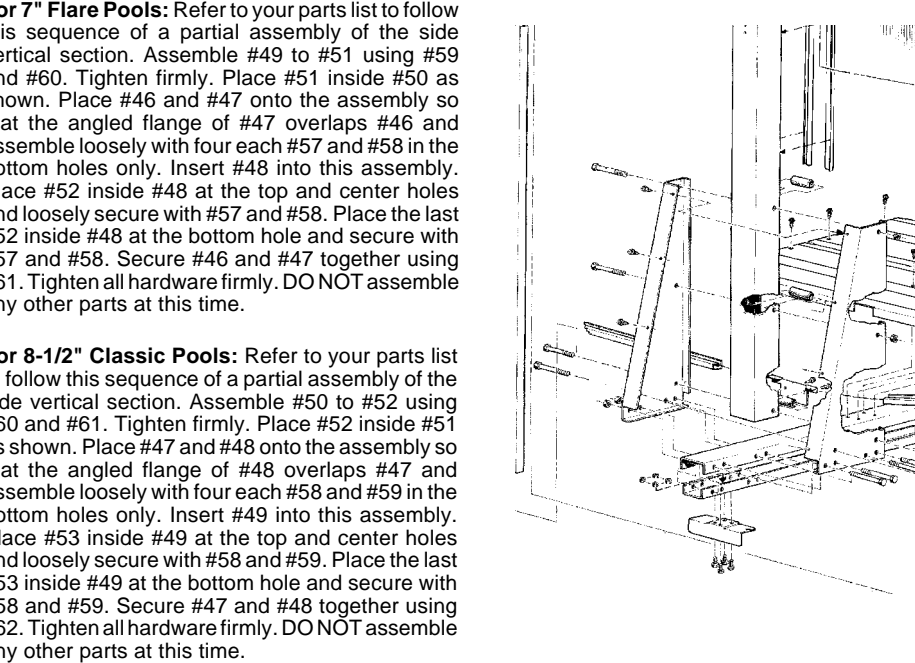
TILTED POOL
If the ground level slopes in any direction more than 1" from one side to the other or 1" from one end to the other, the wall may rupture causing extensive property damage and personal injury. Follow Step 2 carefully, rechecking levelness of ground before proceeding to next step.

2 GROUND LEVELING



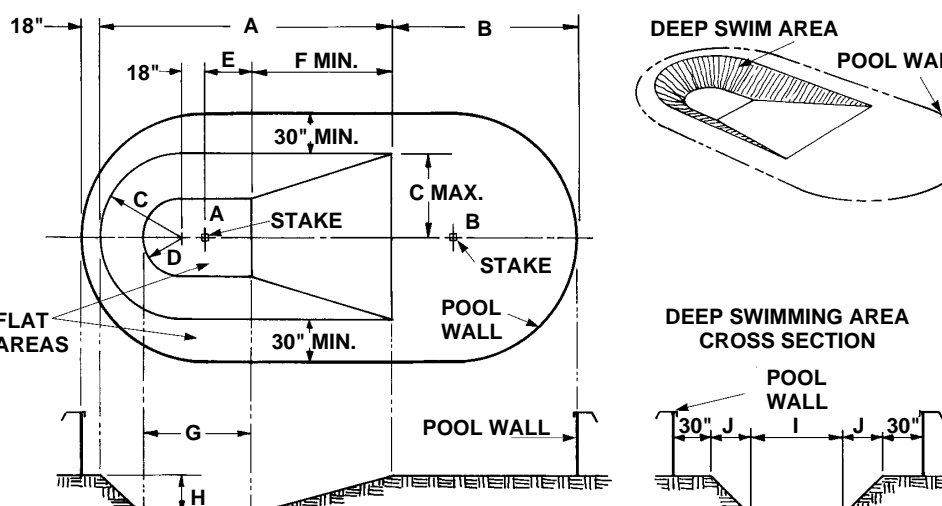
With a shovel and the constructed depth leveling tool shown above, remove sod and level pool area. Level to the lowest spot within pool area. Level side areas to main pool area. **Remove high points - do not fill in low spots. Ground must always be firm.** Be sure pool area is free of stones, sticks, 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. Spend additional time now to avoid disassembly later.

FIG. A EXPLODED SIDE SECTION



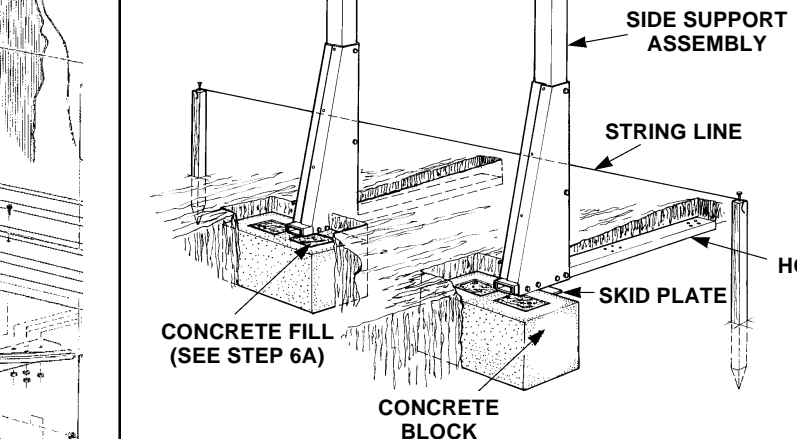
Remove string line. Place concrete blocks into the excavations as shown. **NOTE: The thicker wall side of the concrete blocks must face up.** If over-digging has been done, use only additional 8" x 16" x 2" patio blocks to fill. Place the assembled side supports into each trench with skid plate resting firmly against the face of the concrete blocks. Check each horizontal beam for proper slope (refer to Step 6A).

3 OPTIONAL SPECIAL PURPOSE DEEP SWIMMING AREA ONLY



ONLY 20 MIL. LINERS OR THICKER - You may decide to excavate a deep swimming area as shown above. **The Deep Swimming Area is for underwater swimming only. NO DIVING, NO JUMPING.** To excavate the deep swimming area, use the layout illustrations above, along with the measurements from the chart for your size pool.

6 INSTALL CONCRETE BLOCKS



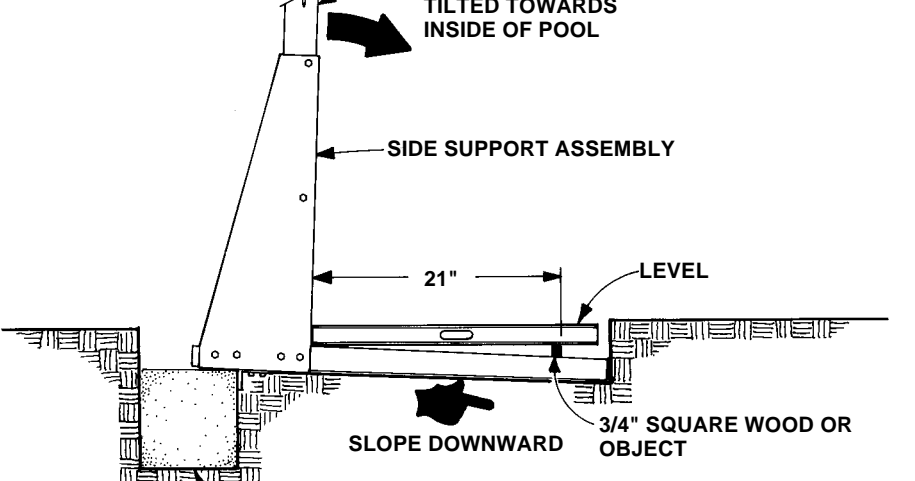
Remove string line. Place concrete blocks into the excavations as shown. **NOTE: The thicker wall side of the concrete blocks must face up.** If over-digging has been done, use only additional 8" x 16" x 2" patio blocks to fill. Place the assembled side supports into each trench with skid plate resting firmly against the face of the concrete blocks. Check each horizontal beam for proper slope (refer to Step 6A).

4 STAKES AND STRING LINES



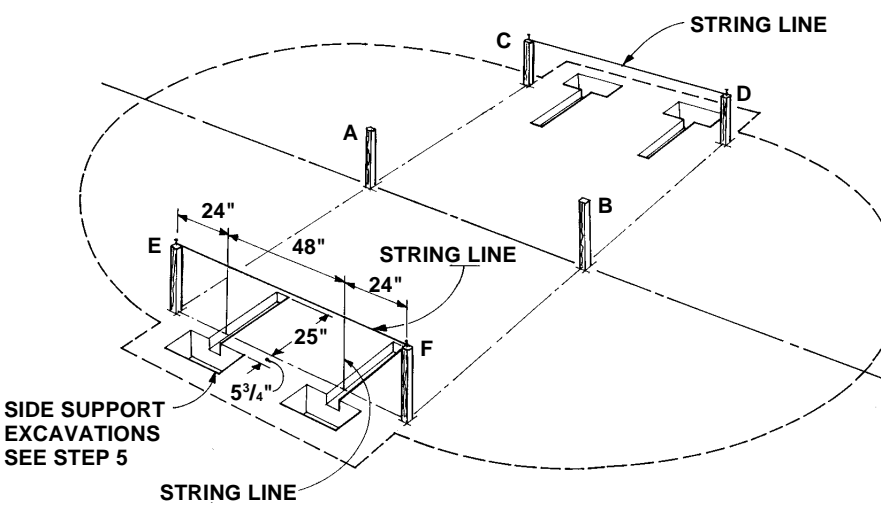
Locate Stakes C, D, E and F from your pool layout. Attach strings between C and D, then E and F. The first side support excavation is positioned 24" from the center of either stake to the center of the excavation. Other side support excavations are 48" center to center.

6A INSTALL CONCRETE BLOCKS



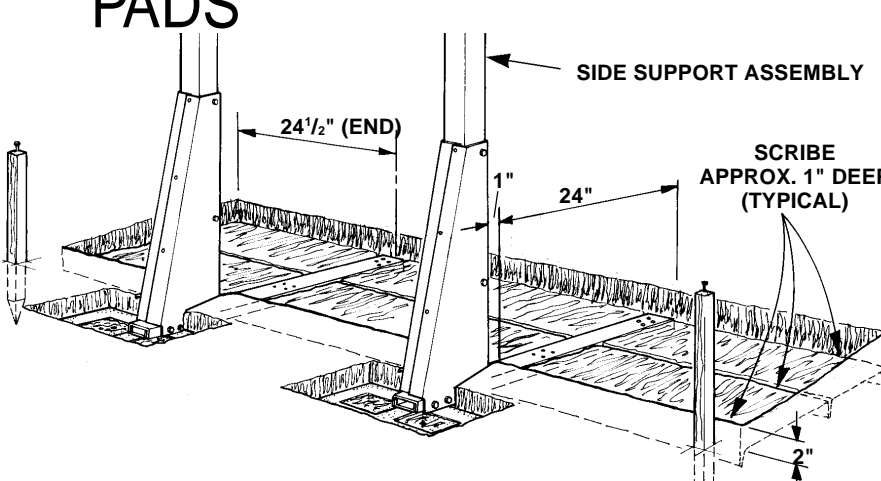
Position a 24" carpenter's level on top of the horizontal beam. Measure 21" from the vertical upright and position a 3/4" thick piece of wood or object under the level on the horizontal beam. It should read level when the horizontal beam is sloping properly. **Fill concrete blocks with concrete mix and level with top of blocks.**

5 SIDE SUPPORT EXCAVATIONS



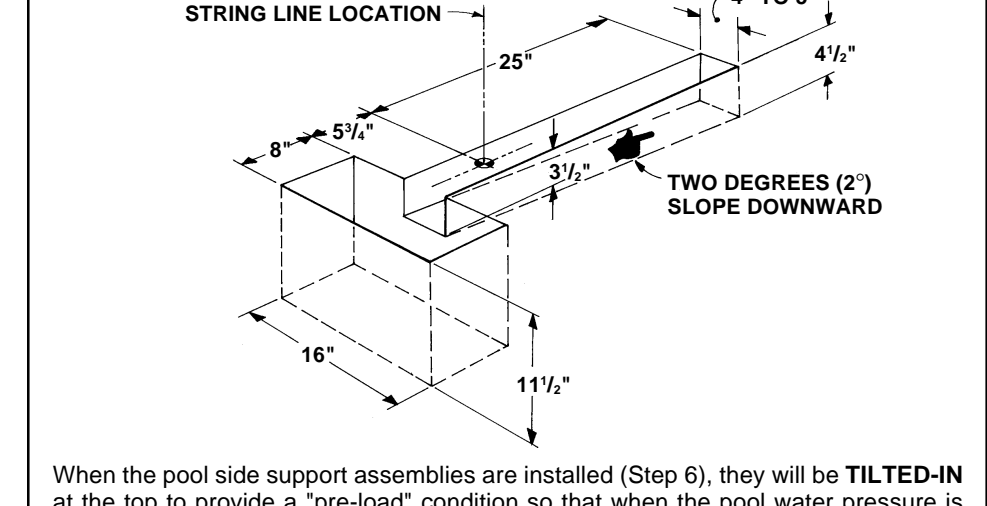
When the pool side support assemblies are installed (Step 6), they will be **TILTED-IN** at the top to provide a "pre-load" condition so that when the pool water pressure is against the wall, the sides will become vertical. Without this "pre-load," the wall will tilt outward at the top and a bowed curve in the top rails will develop. Carefully dig out side support trenches following dimensions above. It is very important that the trench walls remain firm and undisturbed during and after excavation. **DO NOT** over-excavate with the thought of back-filling later as the side supports will move when pools are filled and pool failure may result.

7 DIG OUT FOR PRESSURE PADS



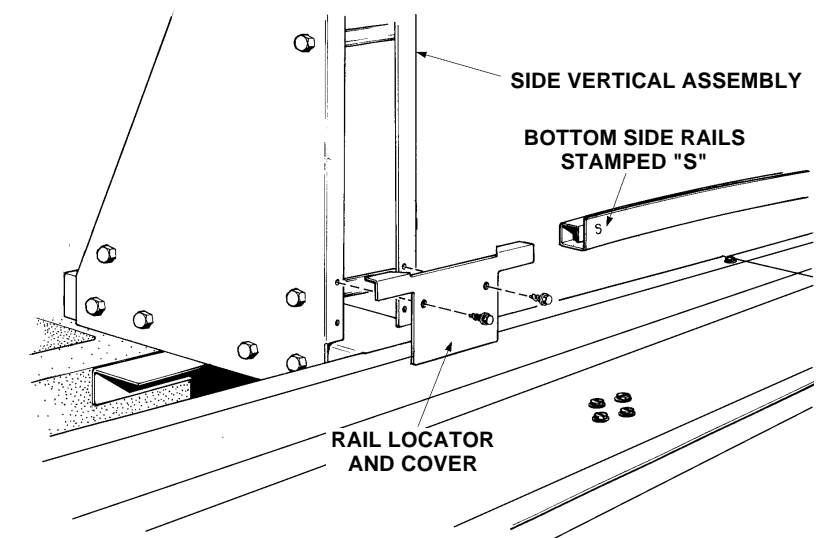
Dig out a trench to the dimensions shown above, grading to sloping horizontal beam. Use a large screwdriver to scribe grooves (approximately 1" deep) down each side and center of the trench for flange clearance on pressure pads. Remove the excess dirt excavated from scribing.

8 INSTALL PRESSURE PADS



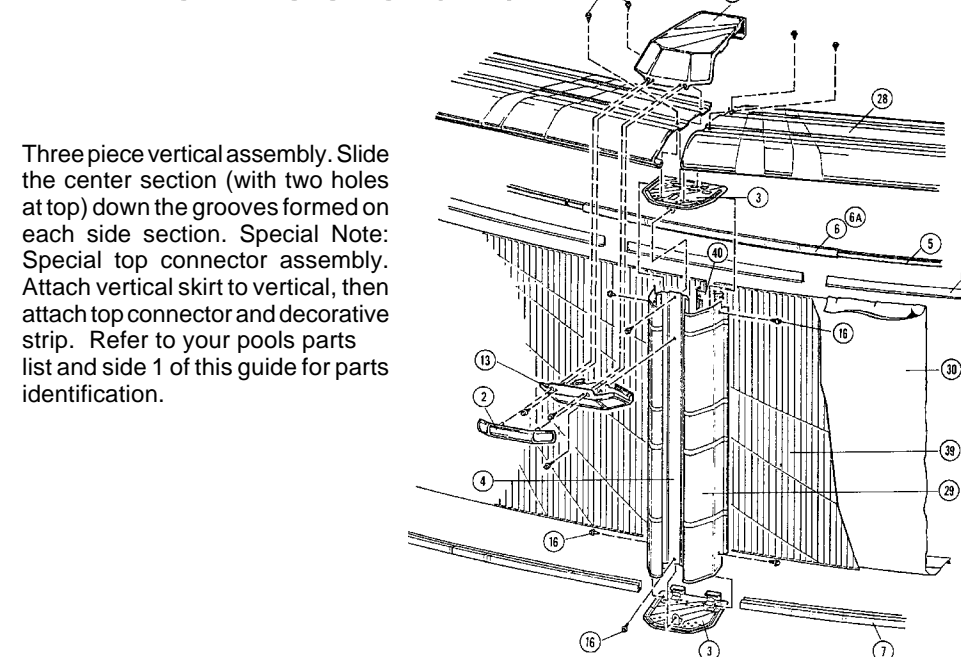
Gently lift side support assemblies out of their excavated positions, taking care not to disturb the excavated trenches. Assemble the two pressure pads onto the horizontal beam as shown in Fig. A, referring to your parts list. Tighten the hardware firmly. Standing outside of the pool, work from left to right, carefully inserting the side support/pressure pad assemblies into the excavations. This is important for aligning small and large screw holes that attach pressure pads together. Use the #10 x 3/8" screws. **DO NOT OMIT ANY.** The skid plate at the bottom of the side support assembly must fit firmly against the concrete block and the pressure pads must be flat on the ground with the flanges down into the scribed grooves.

9 INSTALL BOTTOM RAIL LOCATOR



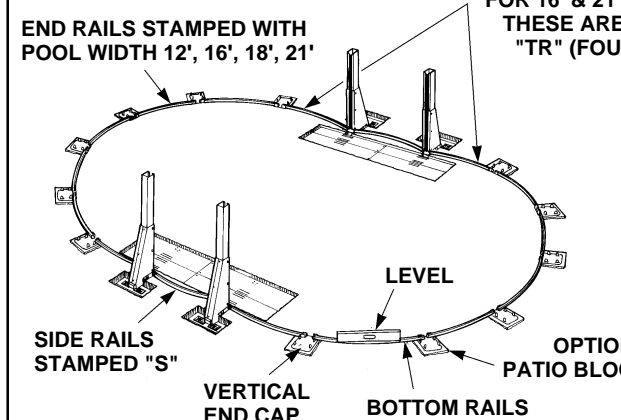
Loosely assemble bottom rails (stamped "S"), groove up, between verticals with bottom rail locators. Secure bottom rail locators to side verticals with screws. NOTE: Be sure to use the top set of holes in the side verticals when assembling the bottom rail locators.

FIG. B EXPLODED END SECTION - CLASSIC 8-1/2"



Three piece vertical assembly. Slide the center section (with two holes at top) down the grooves formed on each side section. Special Note: Special top connector assembly. Attach vertical skirt to vertical, then attach top connector and decorative strip. Refer to your pools parts list and side 1 of this guide for parts identification.

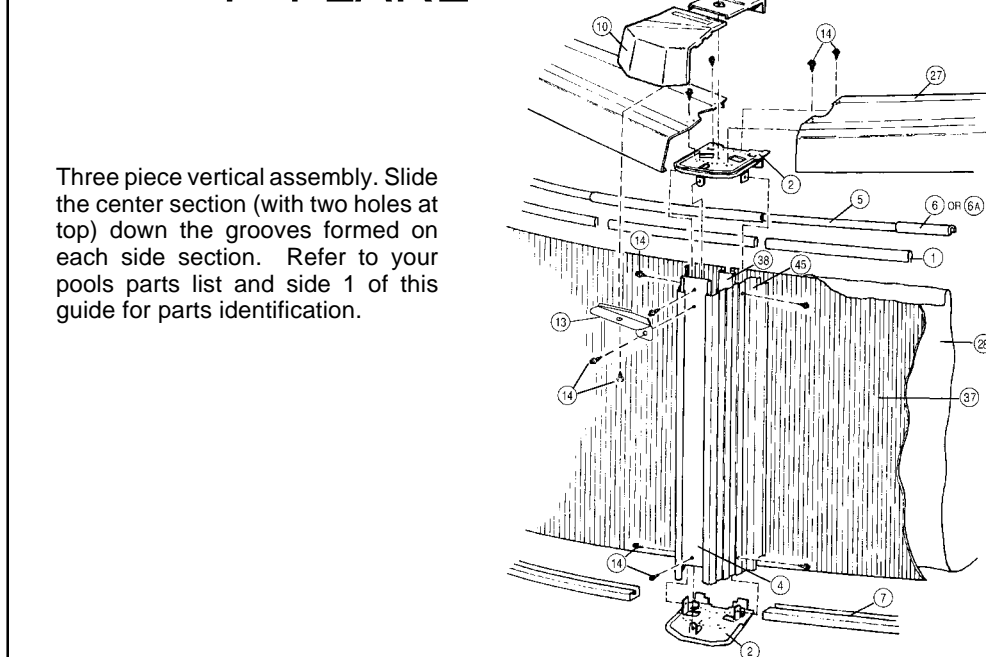
10 INSTALL BOTTOM RAILS



Begin ends of framework by installing the four rails to the outside of the end buttresses (on 16' and 21' wide pools, these rails are stamped "TR"). Complete ends by sliding bottom rails (groove up) into vertical end caps. Confirm levelness of installation by placing level on top of bottom rails. Check around the oval to be sure ground is flat and within 1 inch of level at opposite sides and ends of pool.
Patio Block Installation (optional but recommended): Center 12" x 12" x 2" patio blocks under vertical end caps around ends of pool and mark their positions with a stick. Move bottom

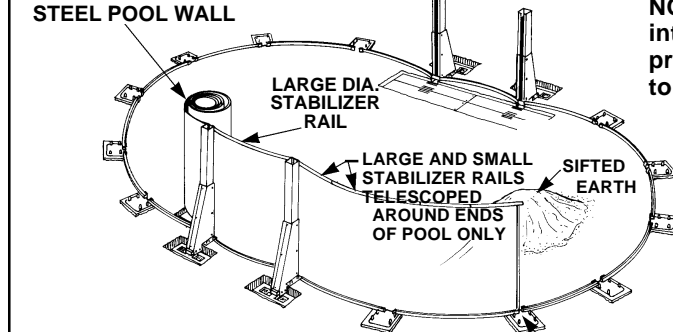
framework from ends out of your way in sections. Turn patio blocks out next to their marked positions. Dig soil in the marked locations away to the depth of the patio block. Patio blocks must sit in solid, undisturbed earth, be flush with level ground, and have no movement when turned back into place. Use leveling tools and/or transit to make sure each block is level and that all blocks are level to each other. Reinstall bottom framework. Check again for levelness, and to see that vertical end caps are centered on patio blocks. Remove all stakes. NOTE: If you will be installing a main drain, refer to those instructions BEFORE installing pool wall.
Refer to the parts explosion, slide one side vertical shim down each flange on the side vertical until it makes contact with the vertical brace.

FIG. C EXPLODED END SECTION - 7" FLARE



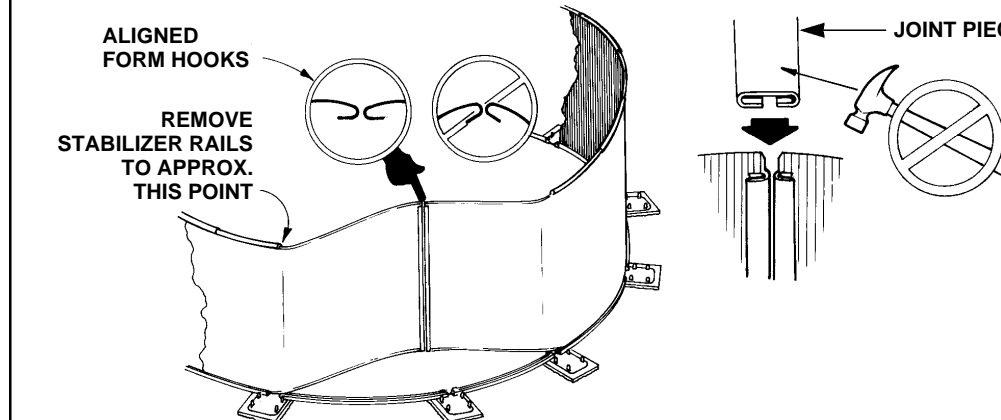
Three piece vertical assembly. Slide the center section (with two holes at top) down the grooves formed on each side section. Refer to your pools parts list and side 1 of this guide for parts identification.

11 INSTALL WALL



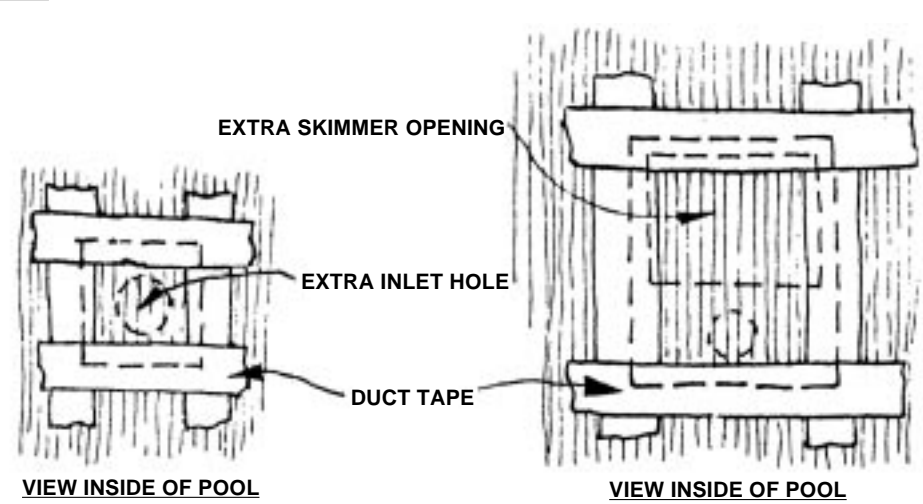
Remove pool wall from carton. Note "Up" arrow on wall. Keep hands and feet from under wall during installation. Determine starting point of wall from PRELIMINARY PLANNING. The skimmer opening will be at the inside end of the wall coil. For improved skimmer operation, position skimmer knockout downward 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. NOTE: The stabilizer rails telescope only on the ends of the pool. Use only the large diameter stabilizer rails between the side supports (these do not telescope).

12 INSTALL WALL JOINT



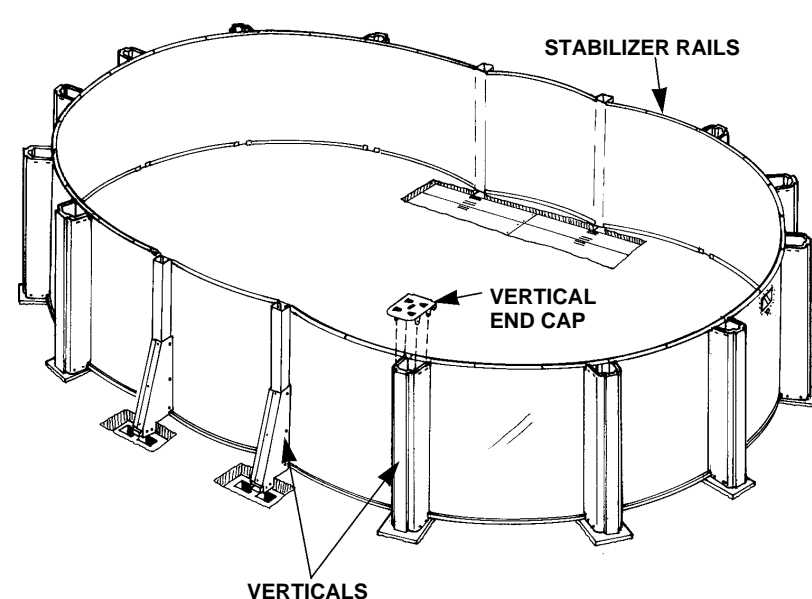
Bring wall ends together in center of vertical end cap. Adjust all bottom rails in or out uniformly if wall ends do not meet. DO NOT make the total adjustments with one or two bottom rails. Remove stabilizer rails in area shown above. Bring pool wall ends inside of bottom rails as shown above. Align 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.

13 COAT OPENINGS



Matching pool wall cover plates are provided with pools that have two skimmer openings. Tape over the extra skimmer and return opening in the event you are only using one skimmer. Use a "Q-Tip" or cotton ball dipped in fast drying enamel to coat all bare metal edges of skimmer opening, return opening and mounting holes. This coating protects edges against corrosion. DO NOT use fingers as sharp edges may cause serious cuts. Enamel must dry prior to installing liner to prevent damage to liner in contact with freshly painted surfaces.

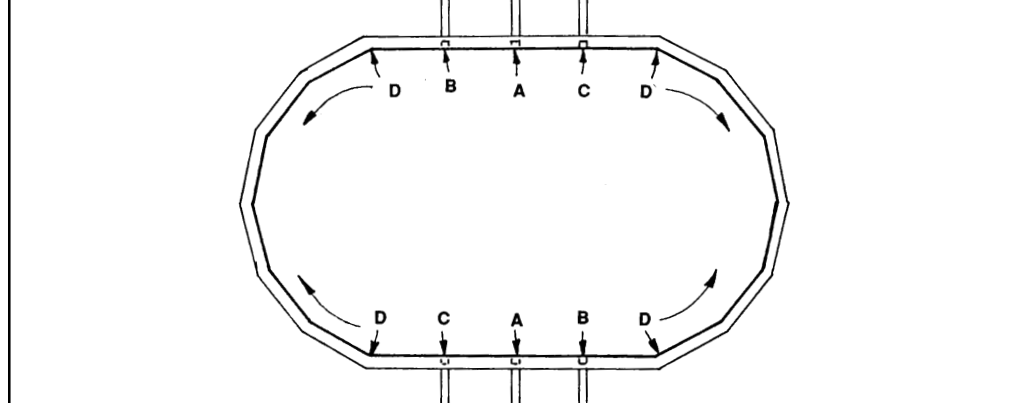
14 INSTALL VERTICALS



Carefully follow the details shown in Fig. B or C to assemble verticals and vertical end caps to pool. Use all necessary hardware. Refer to your pool parts list.

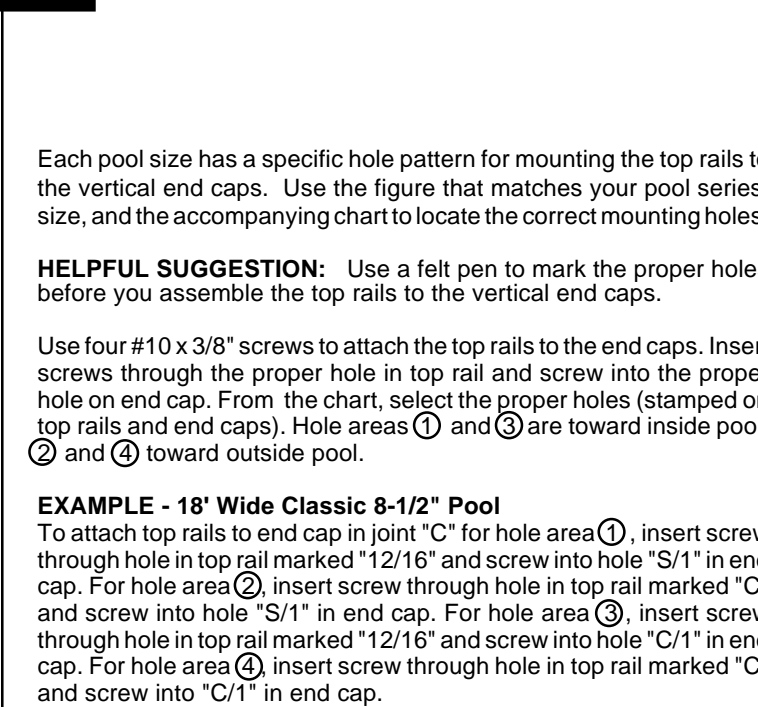
15 TOP RAIL JOINTS

16 INSTALL TOP RAILS



Each pool size has a specific hole pattern for mounting the top rails to the vertical end caps. Use the figure that matches your pool series, size, and the accompanying chart to locate the correct mounting holes.
HELPFUL SUGGESTION: Use a felt pen to mark the proper holes before you assemble the top rails to the vertical end caps.
Use four #10 x 3/8" screws to attach the top rails to the end caps. Insert screws through the proper hole in top rail and screw into the proper hole on end cap. From the chart, select the proper holes (stamped on top rails and end caps). Hole areas ① and ② are toward inside pool, ③ and ④ toward outside pool.
EXAMPLE - 18" Wide Classic 8-1/2" Pool
To attach top rail to end cap in joint "C" for hole area ①, insert screw through hole in top rail marked "12/16" and screw into hole "S1/1" in end cap. For hole area ②, insert screw through hole in top rail marked "C" and screw into hole "S1/1" in end cap. For hole area ③, insert screw through hole in top rail marked "12/18" and screw into hole "C/1" in end cap. For hole area ④, insert screw through hole in top rail marked "C" and screw into "C/1" in end cap.

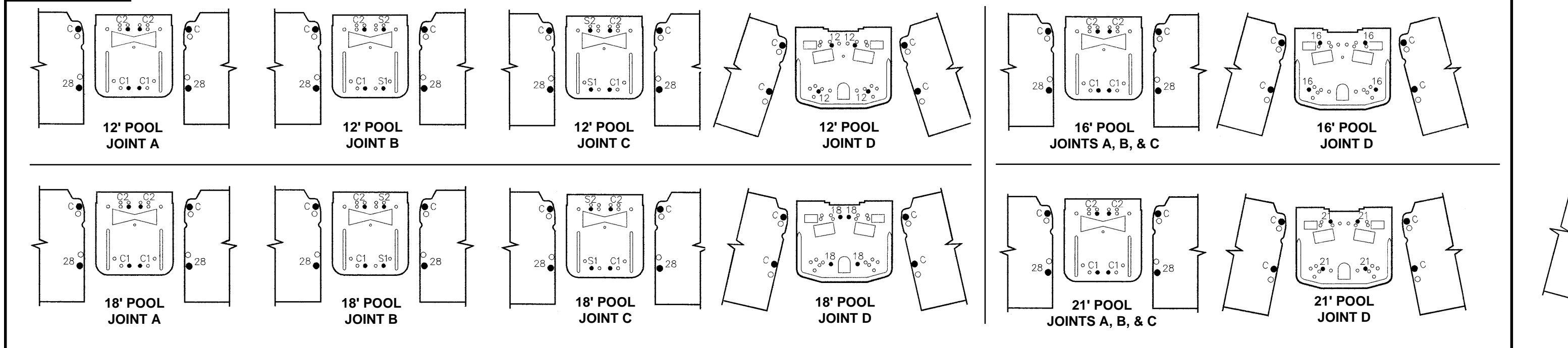
16 cont' INSTALL TOP RAILS



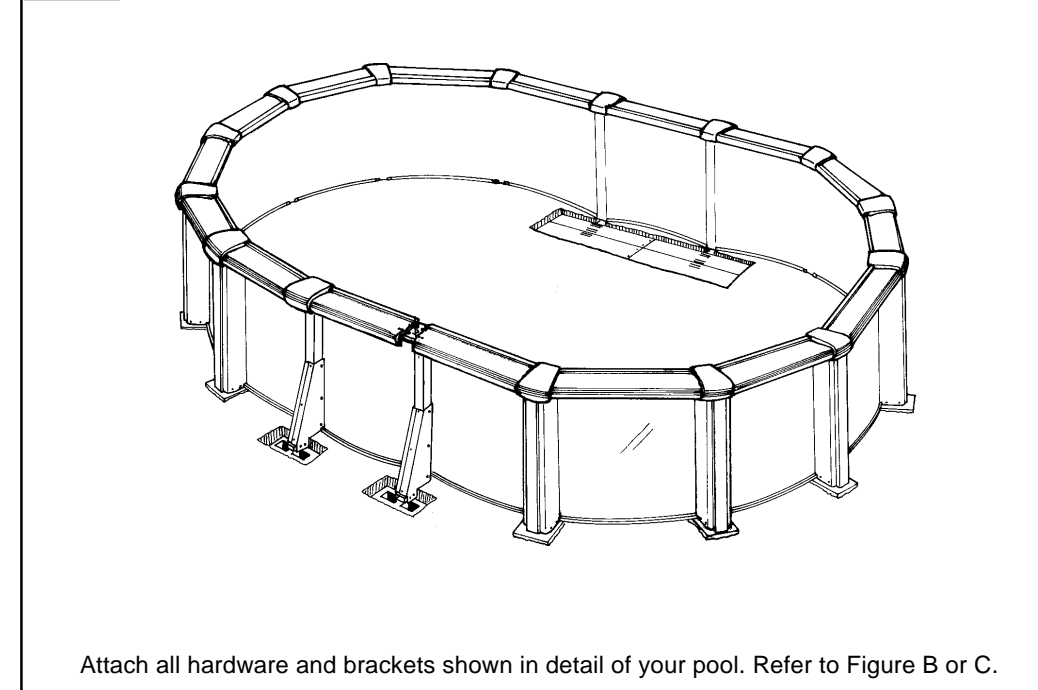
16', 18' & 21' POOL WIDTHS	JOINT A			JOINT B			JOINT C			JOINT D		
	16'	18'	21'	16'	18'	21'	16'	18'	21'	16'	18'	21'
Hole 1 - Top Rail	12/16	12/16	12/16	12/16	12/16	12/16	12/16	12/16	12/16	12/16	C	C
Hole 1 - End Cap	C/1	C/1	C/1	C/1	C/1	C/1	S/1	C/1	C/1	16/28	18/21	21/16
Hole 2 - Top Rail	C	C	C	C	C	C	C	C	C	C	C	C
Hole 2 - End Cap	C/1	C/1	C/1	C/1	C/1	C/1	S/1	C/1	S/1	C/1	16/28	18/21
Hole 3 - Top Rail	12/16	12/16	12/16	12/16	12/16	12/16	12/16	12/16	12/16	12/16	C	C
Hole 3 - End Cap	C/1	C/1	C/1	C/1	S/1	C/1	C/1	C/1	C/1	C/1	16/28	18/21
Hole 4 - Top Rail	C	C	C	C	C	C	C	C	C	C	C	C
Hole 4 - End Cap	C/1	C/1	C/1	C/1	S/1	C/1	C/1	C/1	C/1	C/1	16/28	18/21

12', 16', 18' & 21' POOL WIDTHS	JOINT A			JOINT B			JOINT C			JOINT D		
	12'	16'	18'	12'	16'	18'	12'	16'	18'	12'	16'	18'
Hole 1 - Top Rail	C	C	C	C	C	C	C	C	C	C	C	C
Hole 1 - End Cap	C/2	C/2	C/2	C/2	C/2	C/2	S/2	C/2	S/2	C/2	C/2	C/2
Hole 2 - Top Rail	28	28	28	28	28	28	28	28	28	28	28	28
Hole 2 - End Cap	C/1	C/1	C/1	C/1	C/1	C/1	S/1	C/1	S/1	C/1	C/1	C/1
Hole 3 - Top Rail	C	C	C	C	C	C	C	C	C	C	C	C
Hole 3 - End Cap	C/2	C/2	C/2	S/2	C/2	S/2	C/2	C/2	C/2	C/2	C/2	C/2
Hole 4 - Top Rail	28	28	28	28	28	28	28	28	28	28	28	28
Hole 4 - End Cap	C/1	C/1	C/1	S/1	C/1	S/1	C/1	C/1	C/1	C/1	C/1	C/1

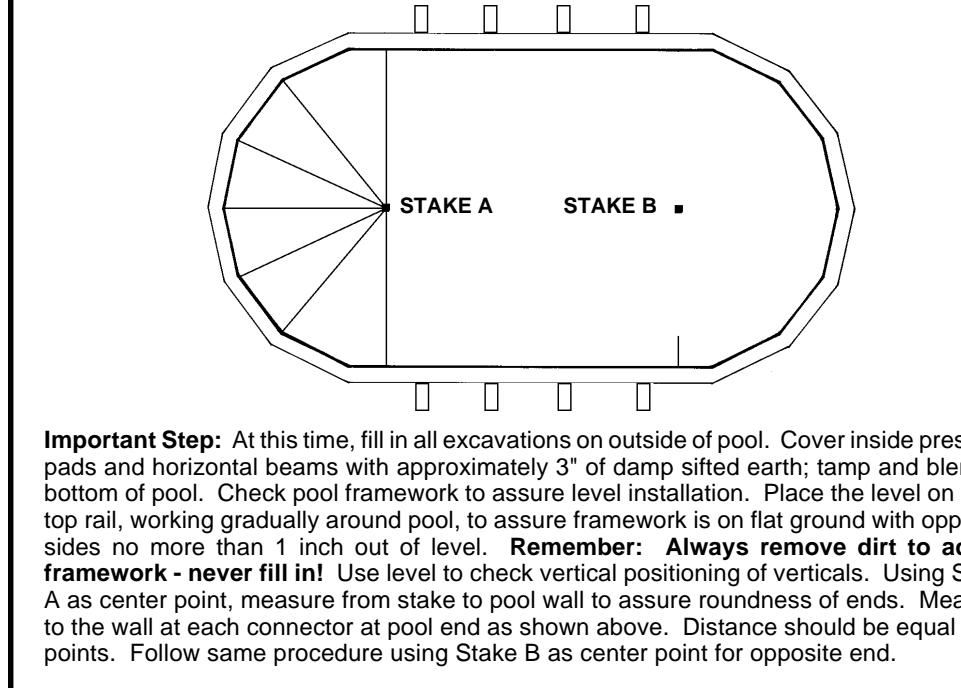
16 cont' INSTALL TOP RAILS



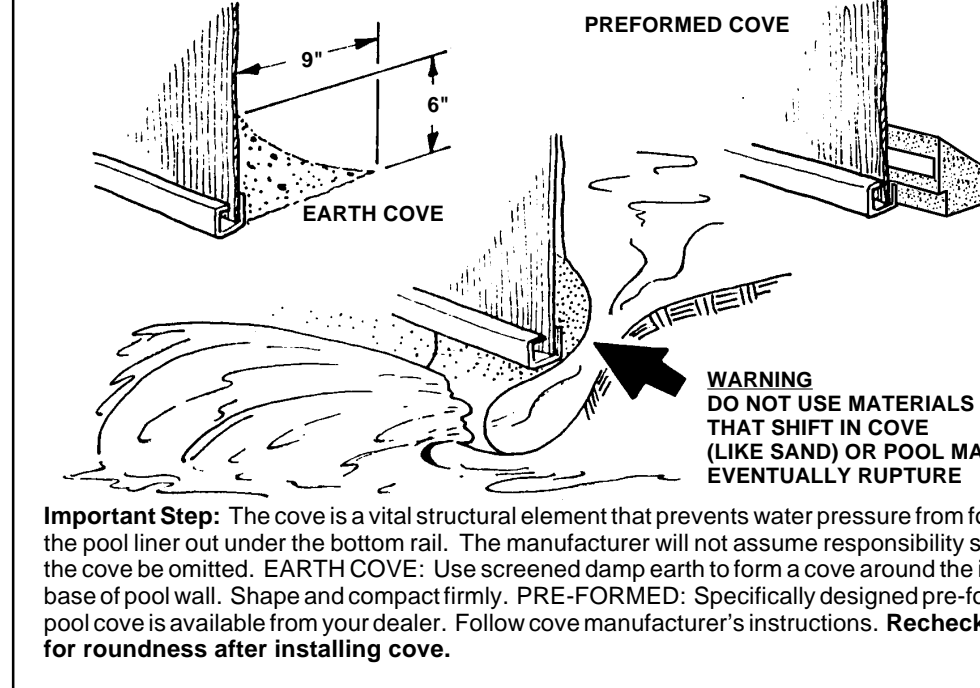
17 ATTACH TOP CONNECTORS



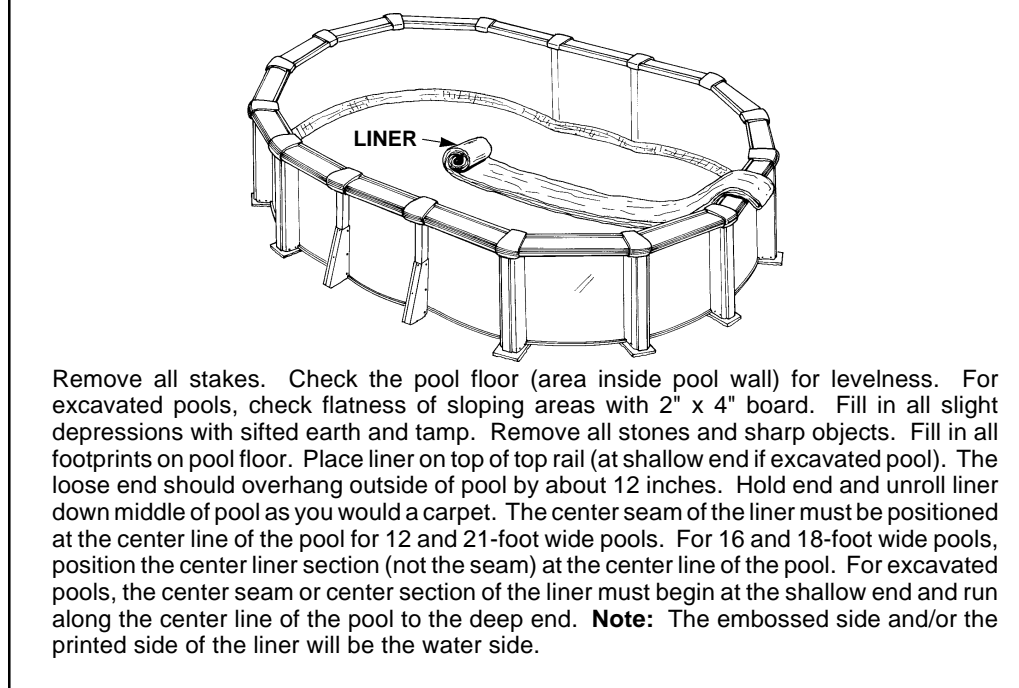
18 CHECK WALL RADIUS



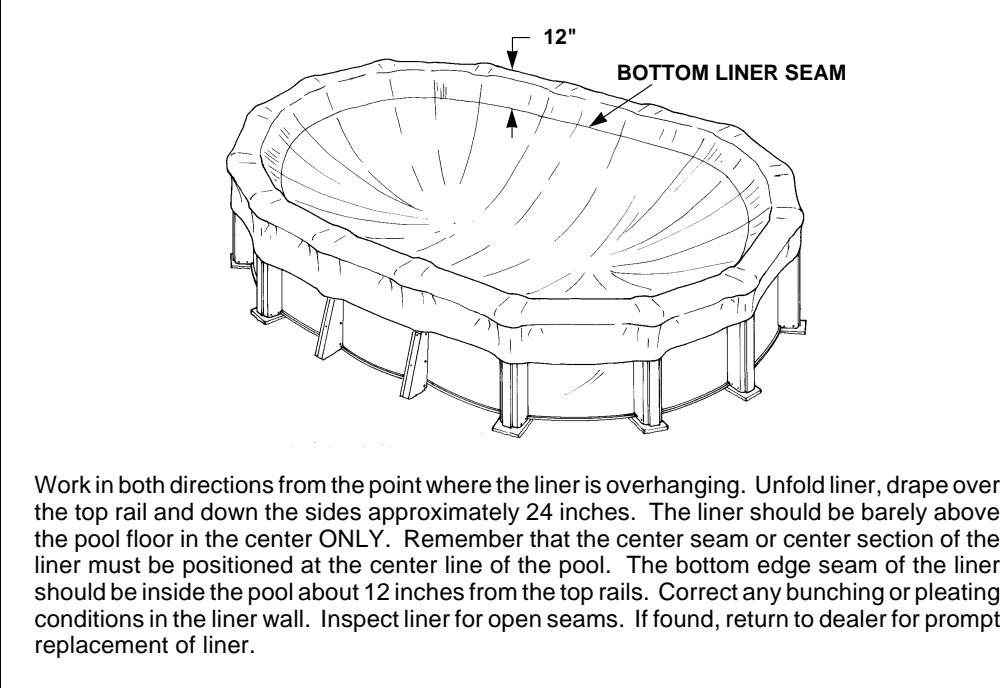
19 COVE



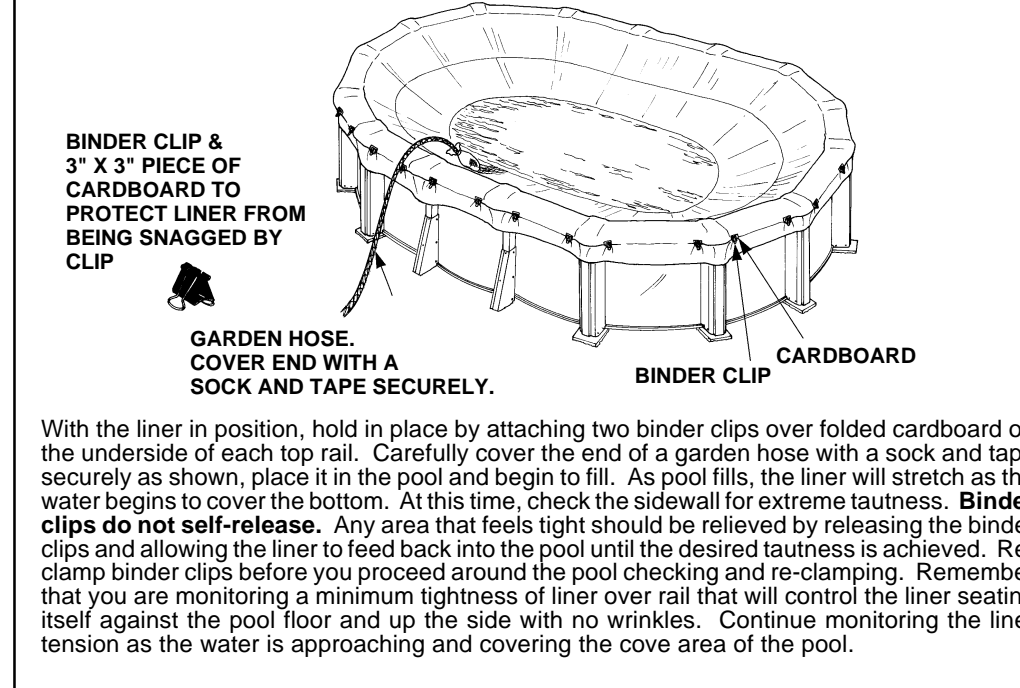
20 LINER SEAM POSITIONING



21 STRETCH LINER

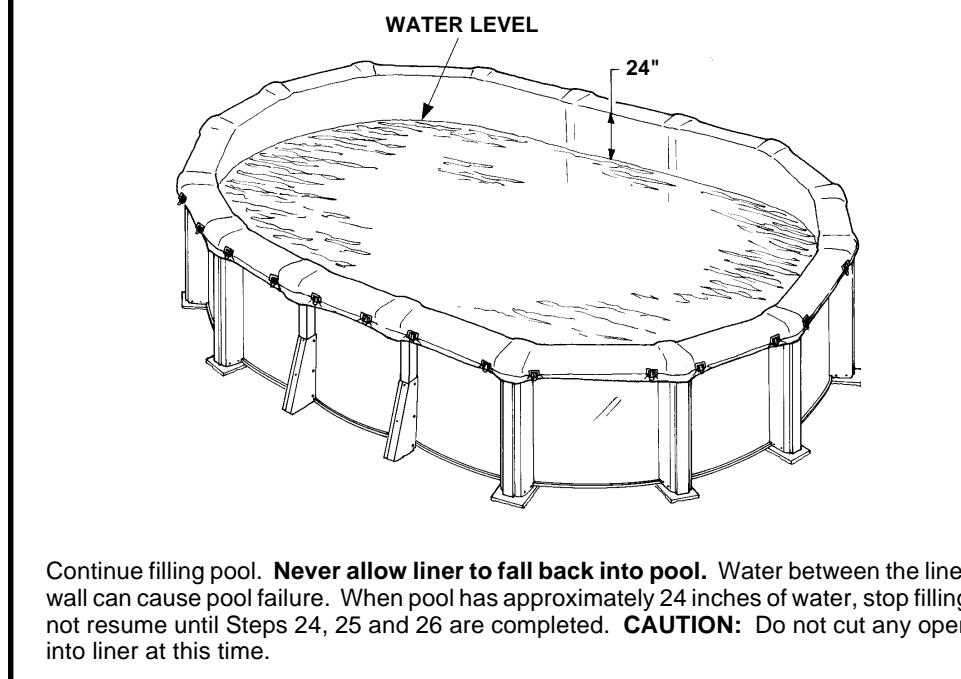


22 FILL POOL

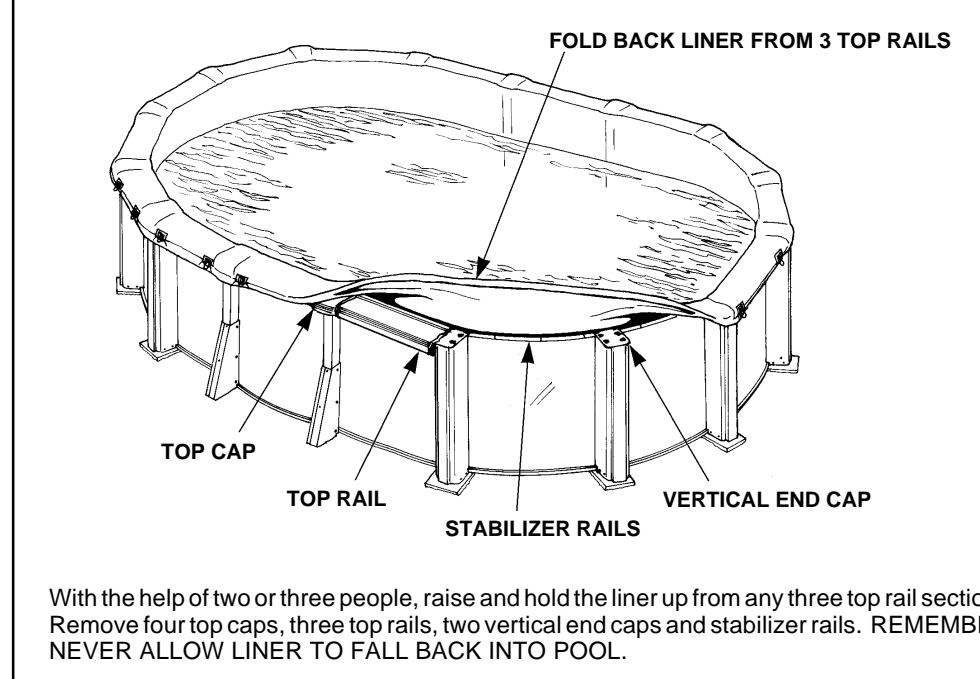


Be sure the liner is evenly distributed over the rail without any bunching or pleating. If this occurs, correct as you are adjusting the liner tension. To correct, grasp the liner wall nearest the wrinkled area. Pull and lift the liner wall just enough to stretch out wrinkles or pleats. It is easier 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.
When the water is approximately 6 inches up the metal wall and covering the cove, there should be just barely enough tension on the liner to control a wrinkle-free installation.
Filling Deep Excavated Pools: It is important to remember that the floor of the liner (not the liner wall) must stretch into the excavated area. The bottom edge seam should be located in the cove area all the way around the pool when the pool is full of water. Stretch the liner properly or you will end up with the bottom edge seam somewhere on the bottom of the pool and not enough liner wall to go over the steel wall to complete the installation. When this happens, you may think you've received the wrong liner, when in fact the liner was improperly stretched into place.
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.

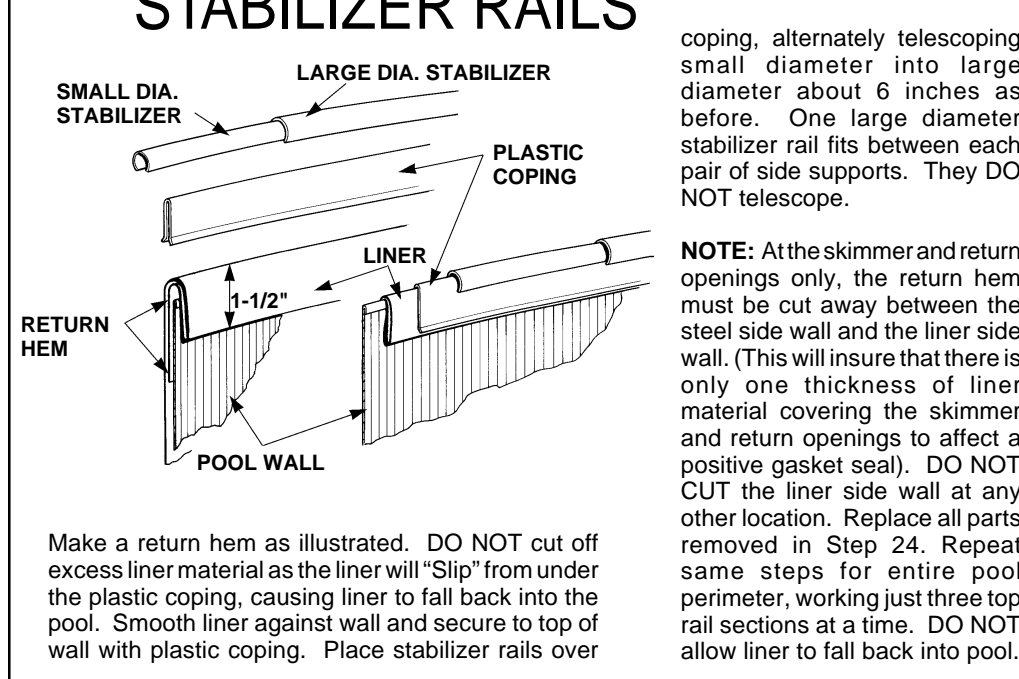
23 CONTINUE FILLING POOL



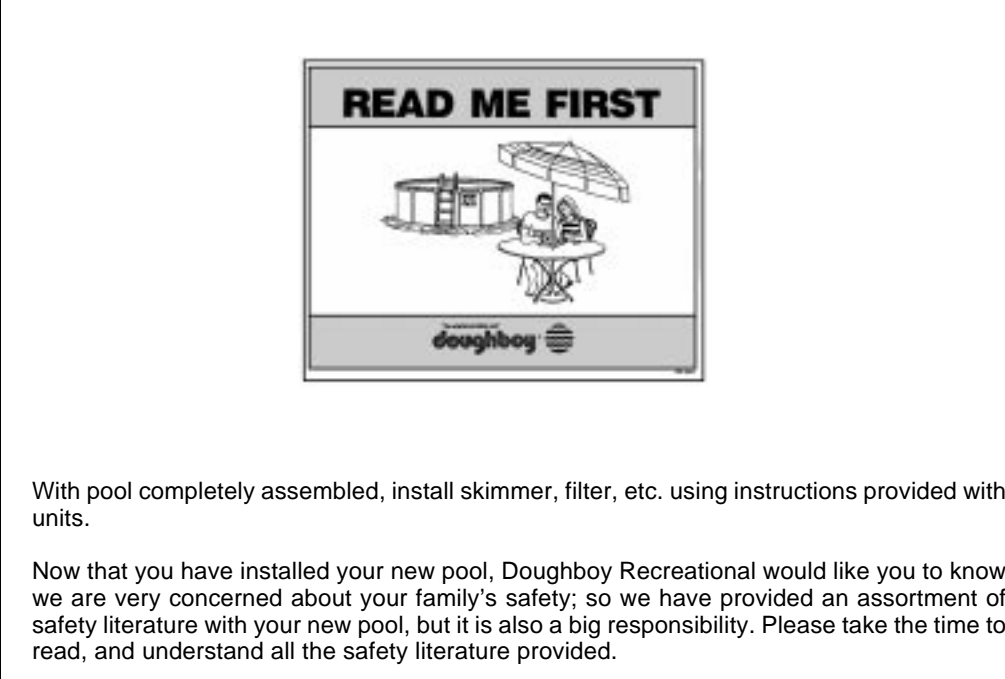
24 PROCEDURE TO ATTACH LINER



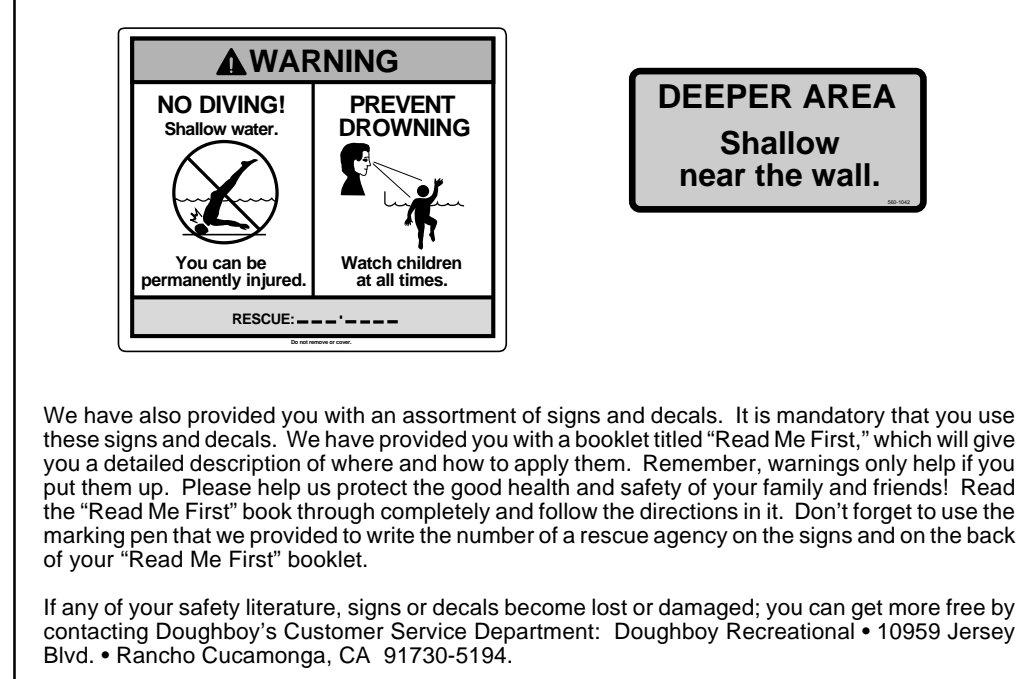
25 INSTALL COPING AND STABILIZER RAILS



26 READ ME FIRST BOOKLET



27 WARNINGS • LABELS • SIGNS



WARNING NO DIVING! Shallow water. You can be permanently injured.
PREVENT DROWNING Watch children at all times.
DEEPER AREA Shallow near the wall.
SHALLOW 3 1/2 FT.
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: Doughboy Recreational 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.