

# OVAL POOLS

## POOL ASSEMBLY AND INSTALLATION INSTRUCTIONS

### THINK "SAFETY FIRST"

Safe 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 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

Doughboy 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", 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.

2) **Wall joint and joint piece** - This is where the wall joins 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. For approved Below-Grade Installation Instructions, see your Doughboy dealer.**

Doughboy pools are not designed to be installed below-grade (buried) using these instructions but must be used in conjunction with the **Below-grade installation instructions**. Outside ground forces can collapse the pool wall.

5) **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.

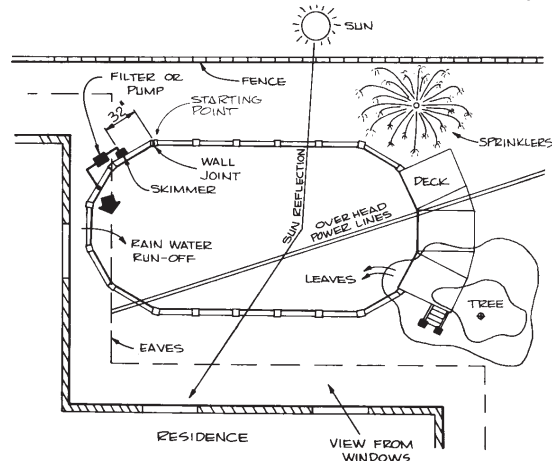
### HOW TO USE THESE INSTRUCTIONS

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).

### 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 Doughboy pool dealer.
14. Do not install liner on nut 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)
  - 12 req'd for 20' x 12'
  - 12 req'd for 24' x 12'
  - 12 req'd for 28' x 12'
  - 12 req'd for 24' x 16'
  - 12 req'd for 28' x 16'
  - 12 req'd for 32' x 16'
  - 14 req'd for 34' x 18'
  - 14 req'd for 38' x 18'
  - 16 req'd for 41' x 21'
- 8" x 8" x 16" concrete blocks
  - 4 each for 20' x 12'
  - 4 each for 24' x 16'
  - 6 each for 24' x 12'
  - 6 each for 28' x 16'
  - 8 each for 28' x 12'
  - 8 each for 32' x 16'
  - 8 each for 34' x 18'
  - 10 each for 38' x 18'
  - 10 each for 41' x 21'
- Quick Set Cement (60 lb. Bags)
  - 2 (dry weight) for 20' x 12'
  - 2 (dry weight) for 24' x 16'
  - 3 (dry weight) for 24' x 12'
  - 3 (dry weight) for 28' x 16'
  - 4 (dry weight) for 28' x 12'
  - 4 (dry weight) for 32' x 16'
  - 4 (dry weight) or 34' x 18'
  - 5 (dry weight) for 38' x 18'
  - 5 (dry weight) for 41' x 21'
- Ball of heavy string
- Binder clips - 1 1/4" - 2" size  
(Available at stationary supply stores)
  - 28 req'd for 20' x 12'
  - 32 req'd for 24' x 12'
  - 32 req'd for 24' x 16'
  - 36 req'd for 28' x 16'
  - 40 req'd for 28' x 12'
  - 40 req'd for 32' x 16'
  - 44 req'd for 34' x 18'
  - 48 req'd for 38' x 18'
  - 52 req'd for 41' x 21'
- 2" x 4" board (See Step 2 for length)
- Duct tape (2" wide)
- Wood stakes - 2" x 2" x 18" (approx. 12)
- Enamel, fast drying (Not lacquer) (Step 13)
- Pool coving (See Step 19)

### Tools Required

- 2' Carpenters 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)
- Two 7/16" wrenches
- Two 9/16" wrenches
- Felt tip marking pen
- Carpenters saw
- Sifting screen (To remove 1/8" pebbles and larger)
- Sharp knife or single edge razor blade
- Pliers
- Drill/Bit (See Step 2)
- Small paint applicator (Q-Tip or brush)

## 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.



10-24 SQUARE NUT  
321-1025



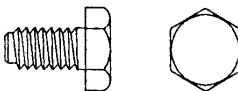
1/4-20 HEX NUT  
511-1000



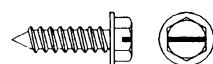
3/8-16 HEX NUT  
321-1069



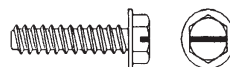
10-24 X 1/2"  
MACHINE SCREW  
510-1008



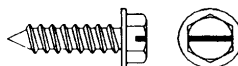
1/4-20 x 1/2"  
MACHINE SCREW  
510-1018



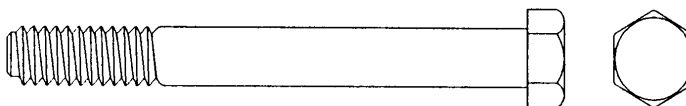
#10 x 1/2" SCREW  
330-1127



#10 x 5/8" SCREW  
330-1057



#12 x 3/4" SCREW  
510-1035

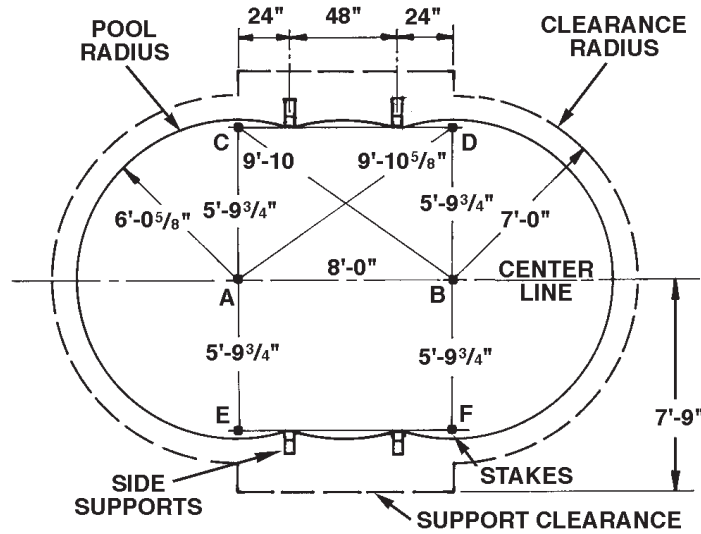


3/8-16 x 3 1/2"  
HEX BOLT  
330-1220

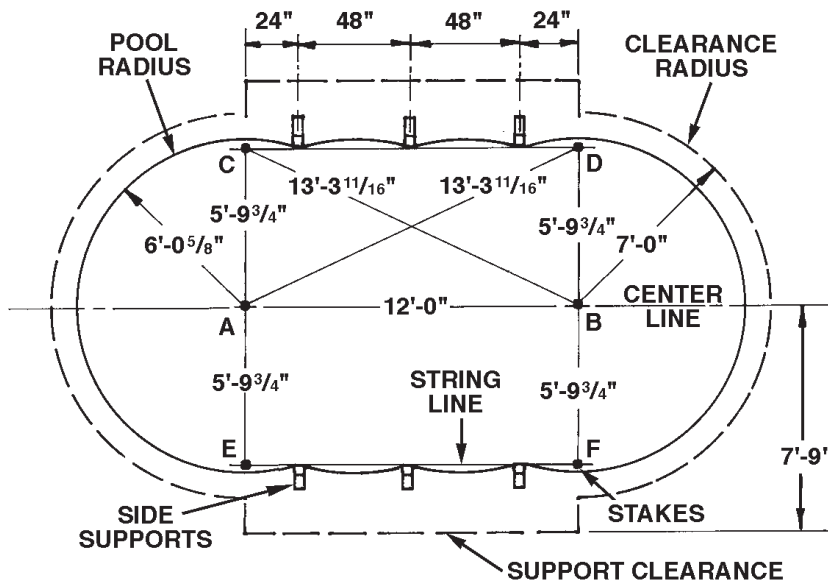
# POOL LAYOUT DIMENSIONS

Numbers across the top represent the pool size in feet (length and width) of Doughboy oval 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.

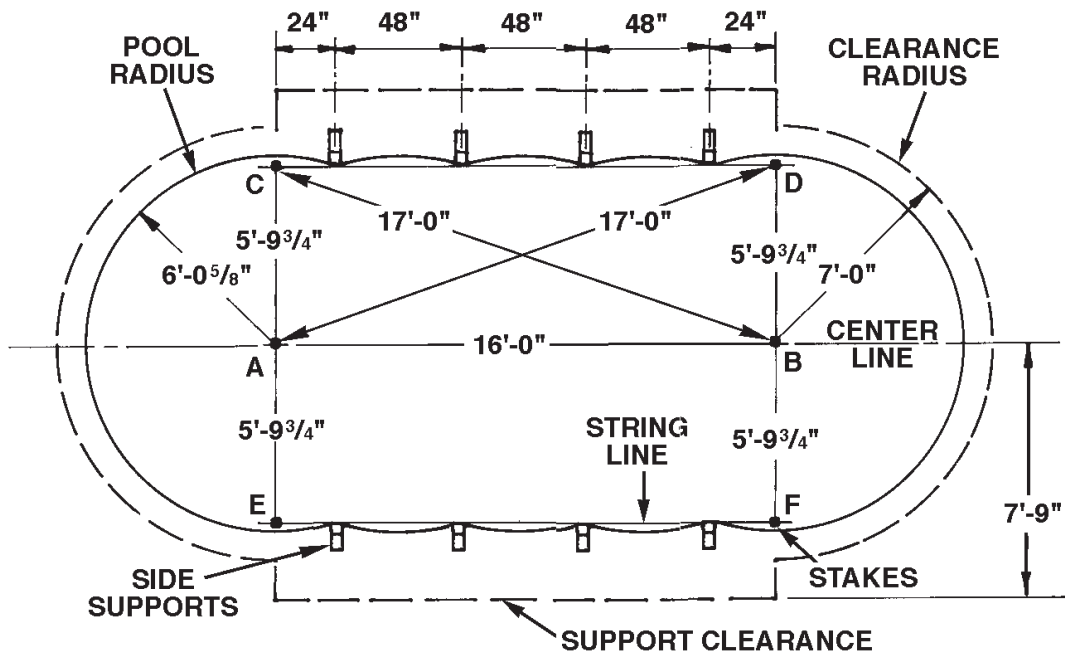
## 20' X 12'



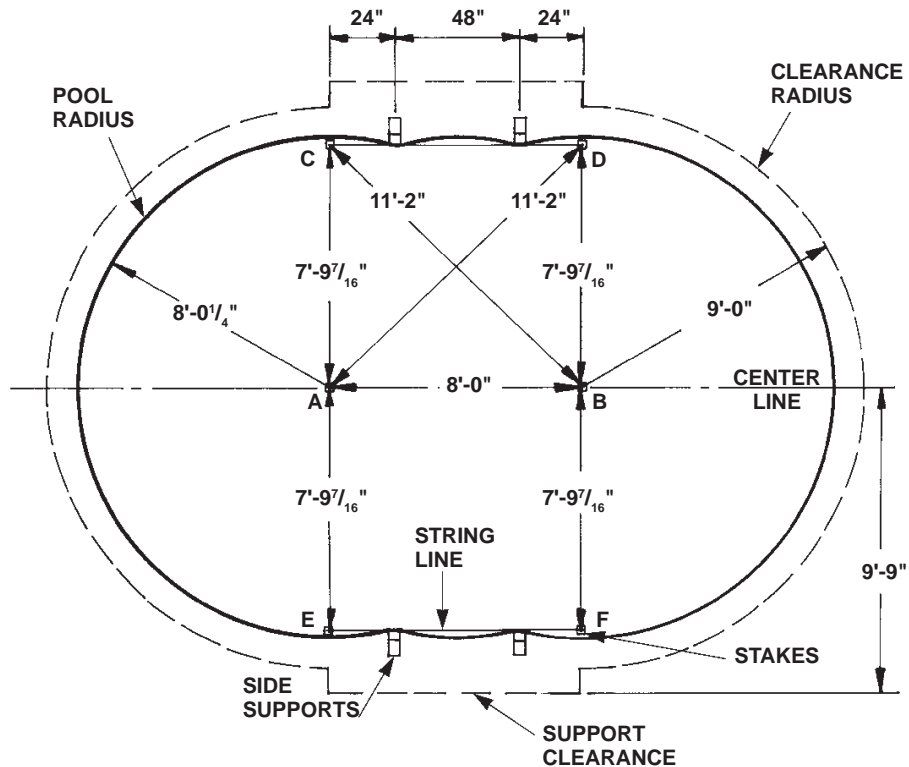
## 24' X 12'



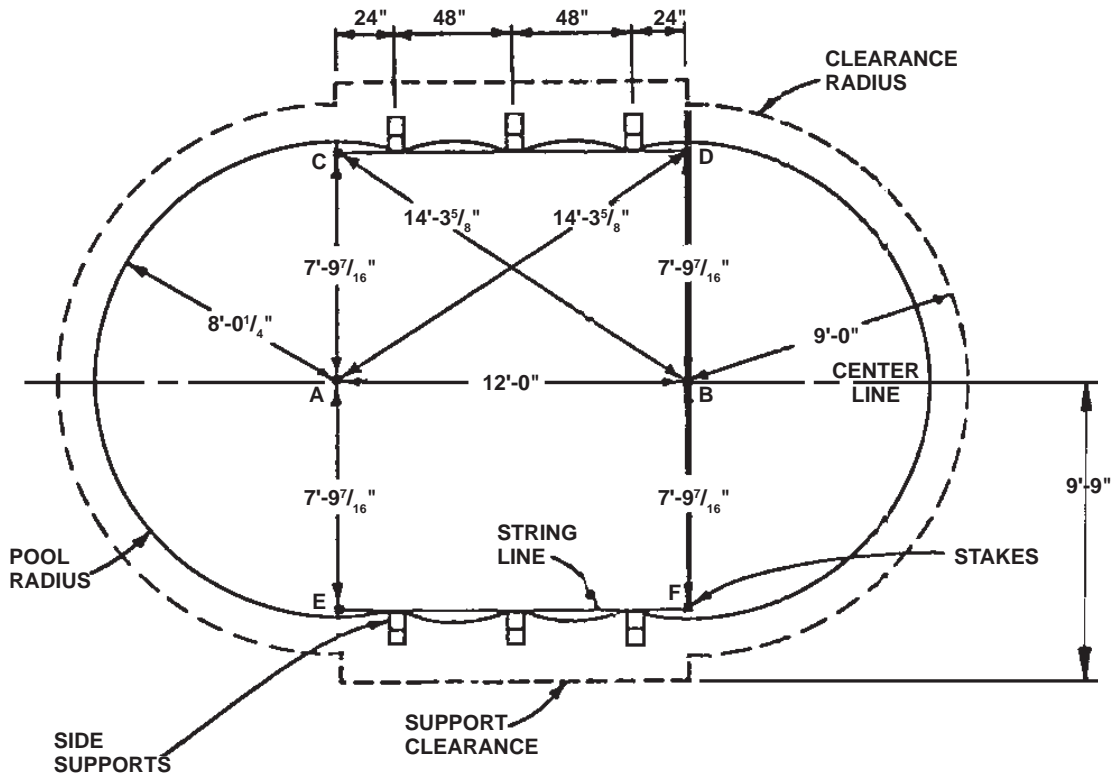
# 28' X 12'



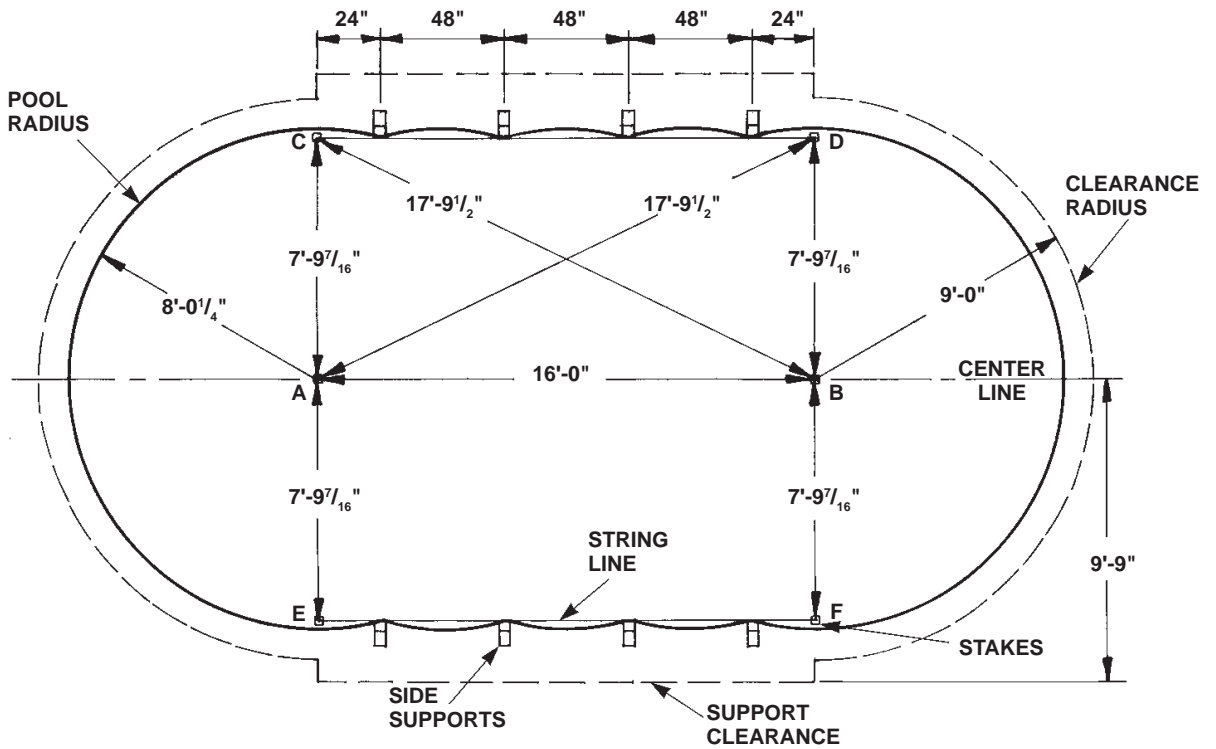
# 24' X 16'



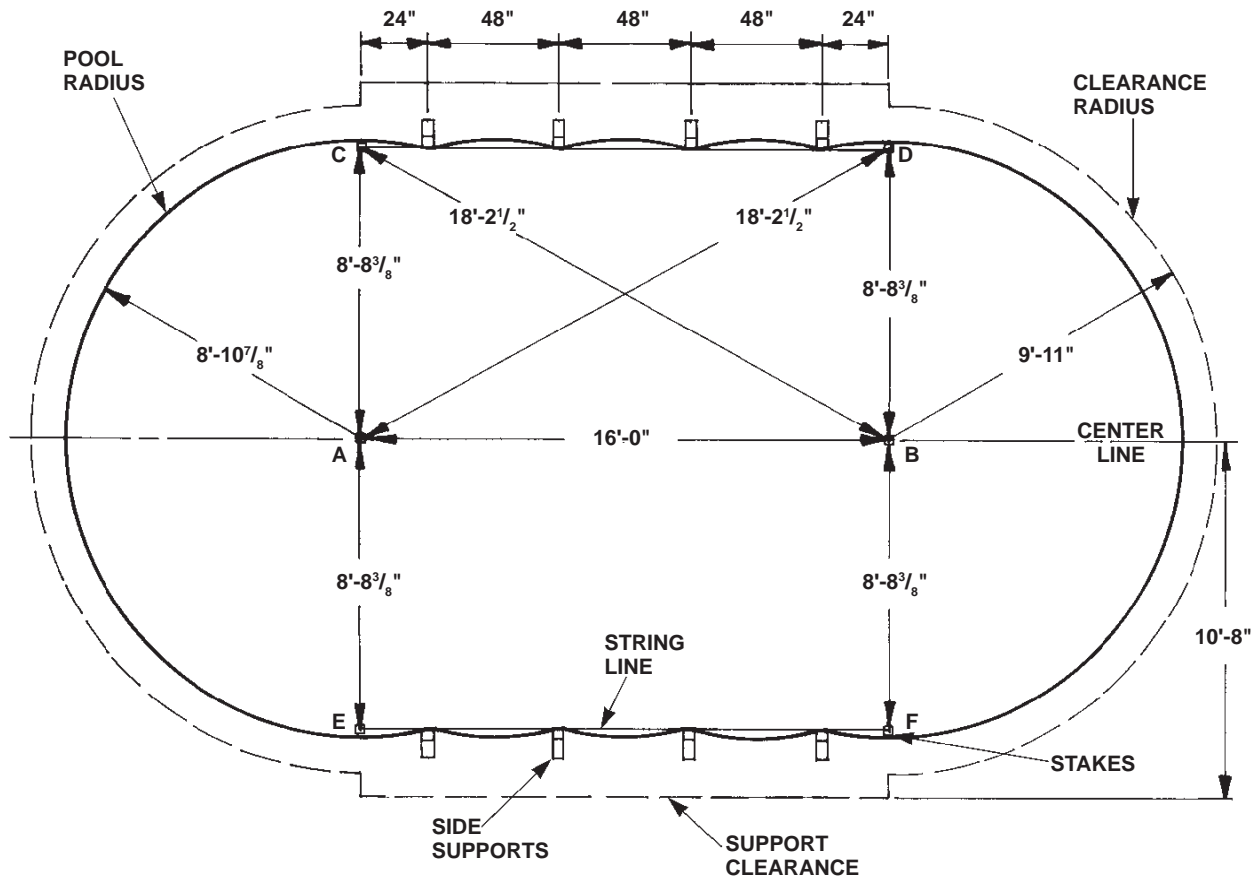
# 28' X 16'



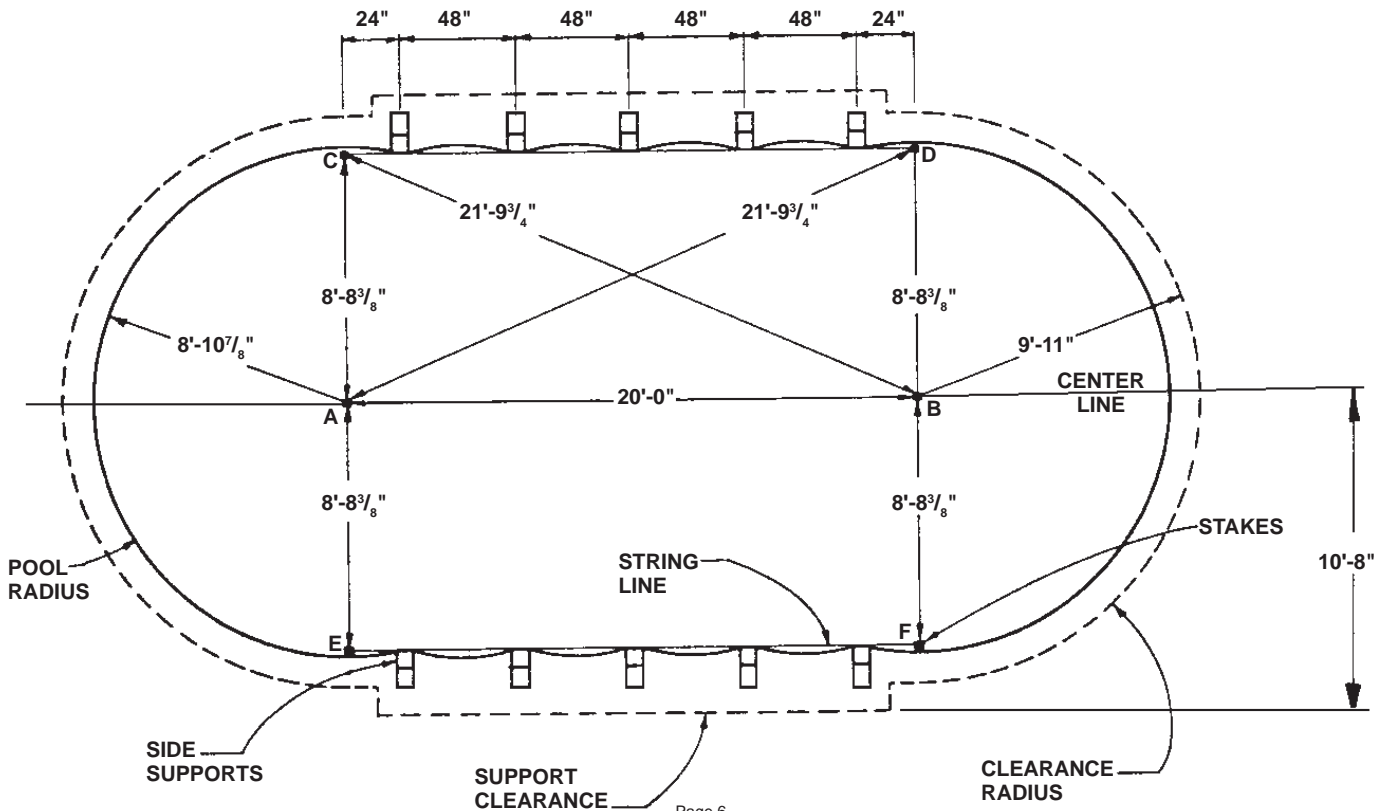
# 32' X 16'



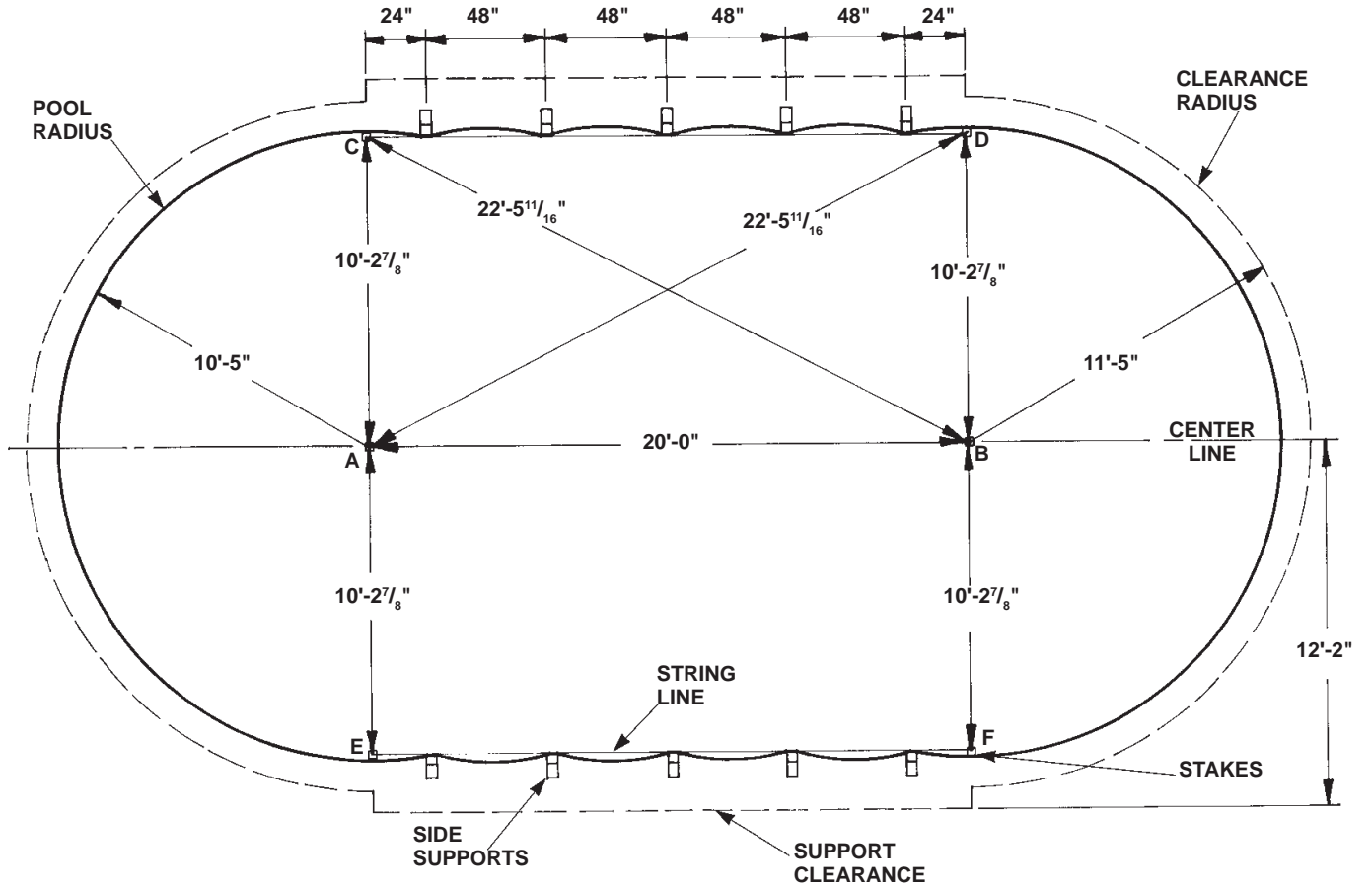
# 34' X 18'



# 38' X 18'

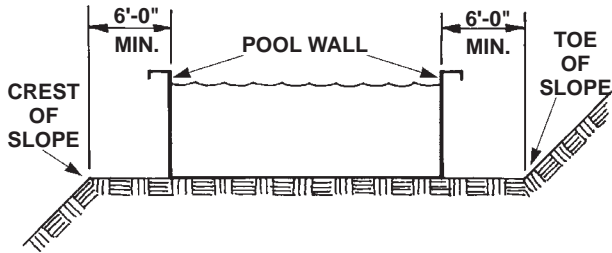


# 41' X 21'



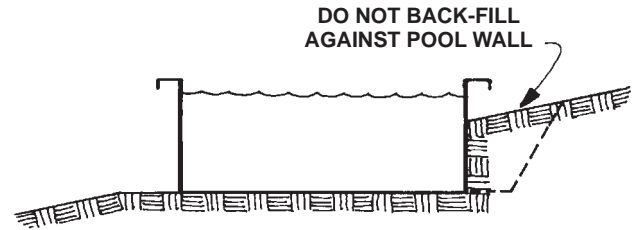
# INSTALLATION CAUTIONS

**ATTENTION:** Doughboy Pools can be installed below-grade by using Doughboy's Below-Grade Installation Instructions. See your local Doughboy dealer.



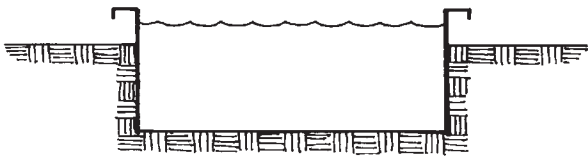
## INSTALLATION NEAR SLOPES

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.



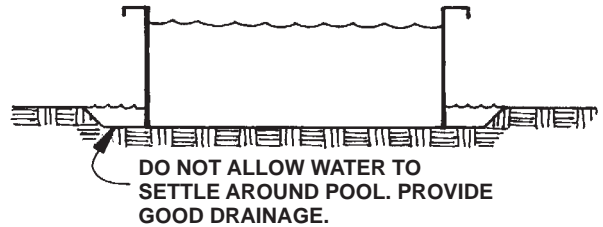
## DO NOT BACKFILL AGAINST POOL WALL

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.



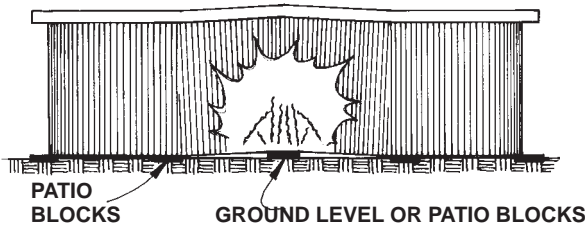
## DOUGHBOY POOLS CAN BE INSTALLED BELOW GRADE WHEN USING SPECIAL BELOW GRADE INSTRUCTIONS

Deep burial of pool into the ground can cause outside ground forces to collapse the pool unless special provisions are made using **Doughboy's Below-Grade Installation Instructions**. See your local Doughboy dealer.



## PROVIDE GOOD DRAINAGE

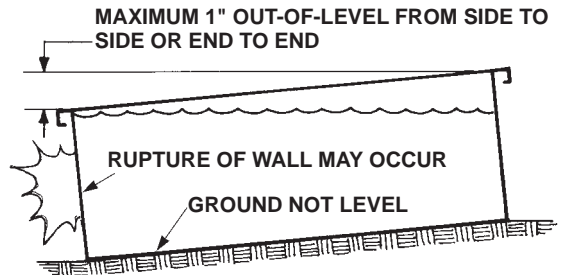
Prevent run-off rain water and general yard watering from settling against the pool frame and wall to prevent corrosion and unsightly crustation build-up on the pool components. Provide good drainage away from pool.



## 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 (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.

**GROUND LEVEL OR PATIO BLOCKS POSITIONED HIGHER THAN ADJACENT AREA AT VERTICALS WILL CAUSE "WRINKLING" OR "BUCKLING" OF THE WALL.**

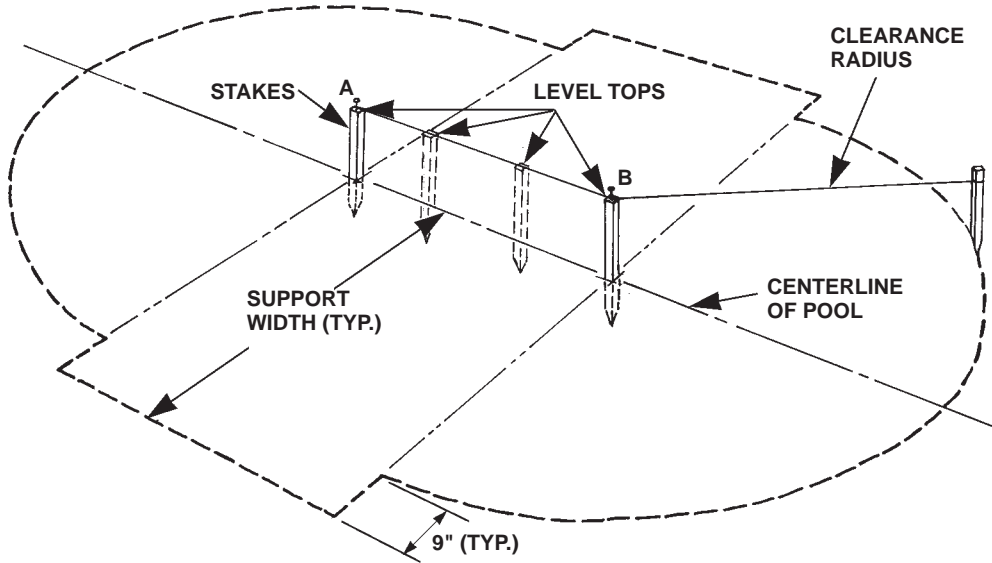


## TILTED POOL

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.



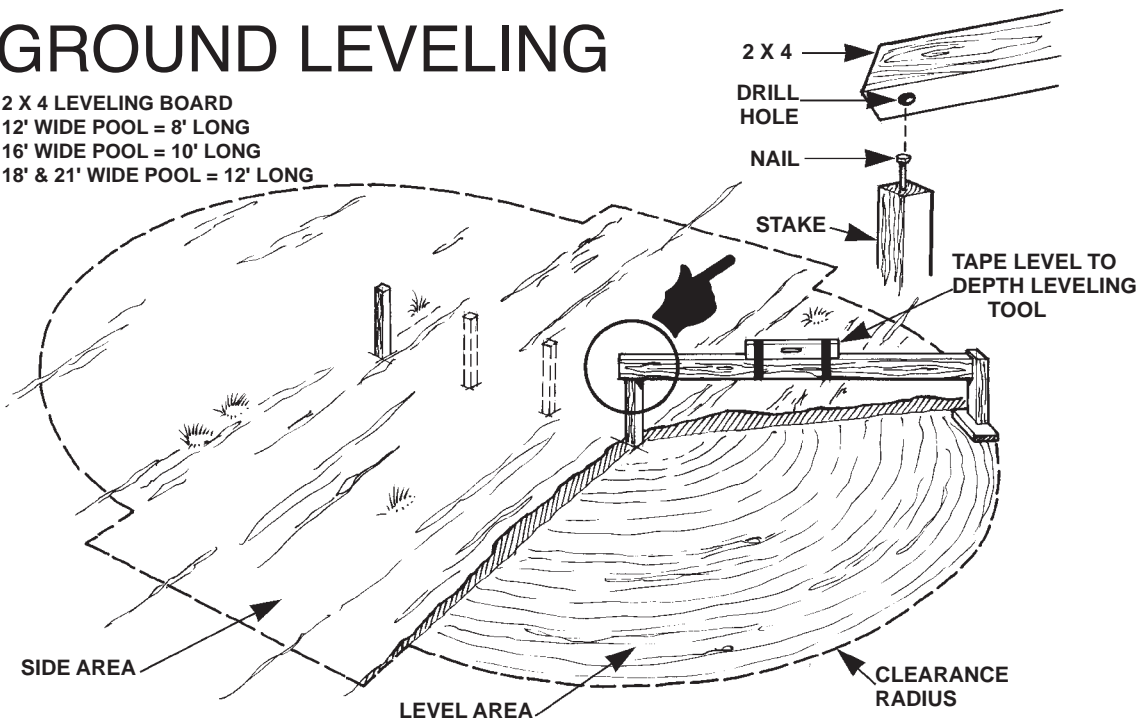
# 1 POOL LAYOUT



Refer to Pool Layout Dimensions for your pool size. Locate stakes A and B. Level tops with long 2" x 4" board and carpenter's level. For longer pools, intermediate stakes leveled between stakes A and B may be necessary. Layout clearances as shown.

# 2 GROUND LEVELING

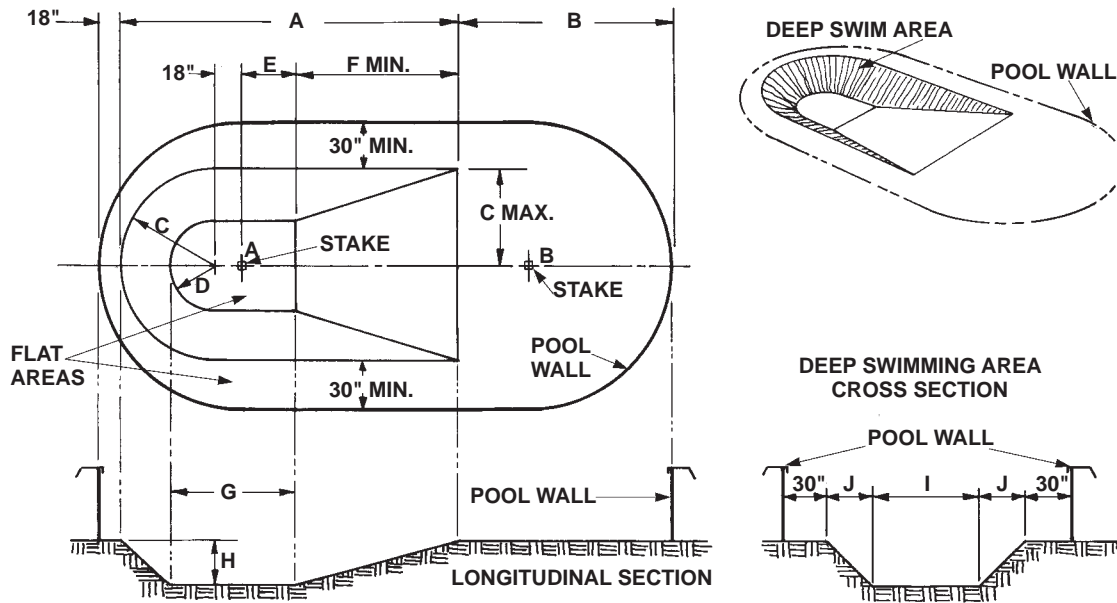
2 X 4 LEVELING BOARD  
 12' WIDE POOL = 8' LONG  
 16' WIDE POOL = 10' LONG  
 18' & 21' WIDE POOL = 12' LONG



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.

# 3

## OPTIONAL SPECIAL PURPOSE DEEP SWIMMING AREA ONLY



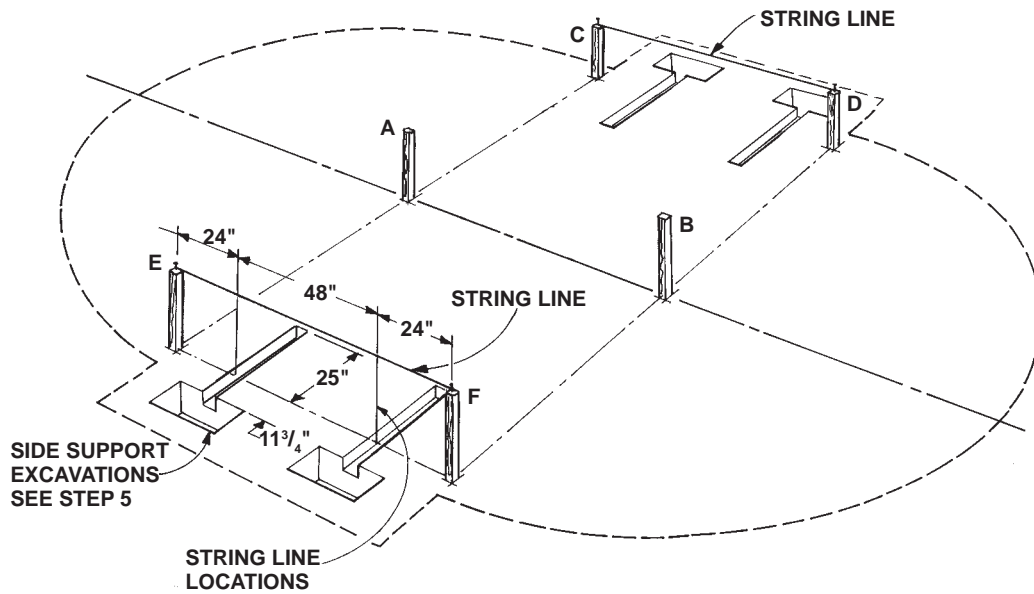
**ONLY 20 MIL. LINERS OR THICKER** - You may decide to excavate a deep swimming area as shown above. **The Deep Swimming Area is for underwater swimming only, NO DIVING, NO JUMPING.** To excavate the deep swimming area, use the layout illustrations above, along with the measurements from the chart for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

**POOL SIZE**

FIG.	20'X12'	24'X12'	28'X12'	24'X16'	28'X16'	32'X16'	34'X18'	38'X18'	41'X21'
A	12'-6"	14'-6"	17'-6"	15'-6"	17'-6"	19'-6"	21'-6"	23'-6"	25'-6"
B	6'-0"	8'-0"	9'-0"	7'-0"	9'-0"	11'-0"	11'-0"	13'-0"	14'-0"
C	3'-0"	3'-0"	3'-0"	5'-0"	5'-0"	5'-0"	6'-0"	6'-0"	7'-6"
D	1'-0"	1'-0"	1'-0"	2'-0"	2'-0"	2'-0"	3'-0"	3'-0"	4'-6"
E	2'-0"	4'-0"	7'-0"	0'-0"	2'-0"	4'-0"	5'-0"	7'-0"	7'-6"
F	6'-0"	6'-0"	6'-0"	9'-0"	9'-0"	9'-0"	9'-0"	9'-0"	9'-0"
G	4'-6"	6'-6"	9'-6"	3'-6"	5'-6"	7'-6"	9'-6"	11'-6"	13'-6"
H	2'-0"	2'-0"	2'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"
I	2'-0"	2'-0"	2'-0"	4'-0"	4'-0"	4'-0"	6'-0"	6'-0"	9'-0"
J	2'-0"	2'-0"	2'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"

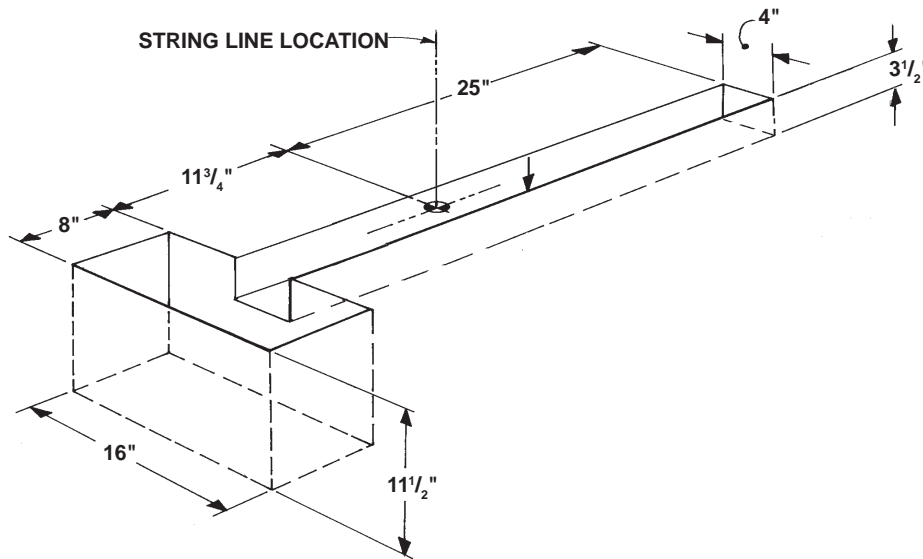
Using either stake 'A' or 'B' as your reference point, lay out and excavate area to the dimensions shown in the above chart for your size pool. Remember **DO NOT DIVE OR JUMP into the pool.** The excavation is intended to provide a deeper and wider swimming area only.

# 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.

# 5 SIDE SUPPORT EXCAVATIONS



Carefully dig out the side support trenches following the 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 because the side supports will move when pool is filled, and pool failure may result.

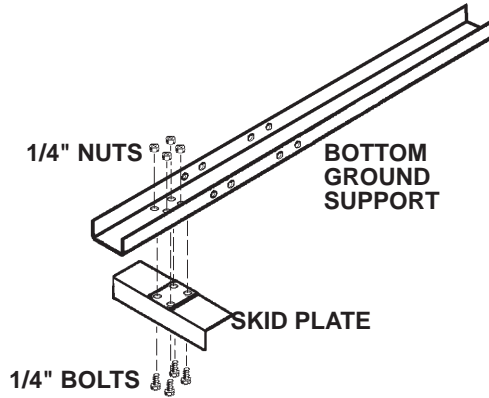
When digging is completed, proceed to FIG. A and partially assemble the side vertical supports.

# FIG. A EXPLODED SIDE SECTION

Partially assemble the side vertical supports following Steps 1 through 4.

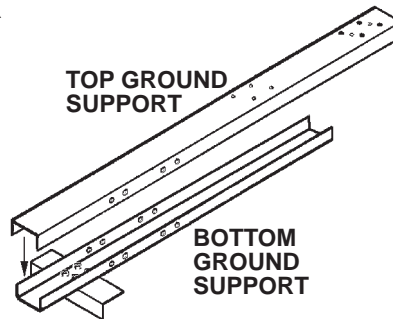
## 1 ATTACH SKID PLATE

Attach the skid plate to the bottom ground support using four (4) 1/4" bolts and nuts as shown. Tighten securely using two 7/16" wrenches.



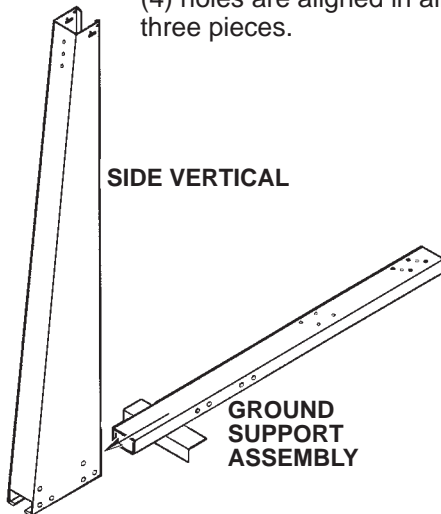
## 2 SLIDE SUPPORTS TOGETHER

Position the top ground support over the bottom ground support and lower it to enclose the bottom ground support.



## 3 SLIDE SUPPORTS INTO VERTICAL

Slide the ground supports into the side vertical until the four (4) holes are aligned in all three pieces.

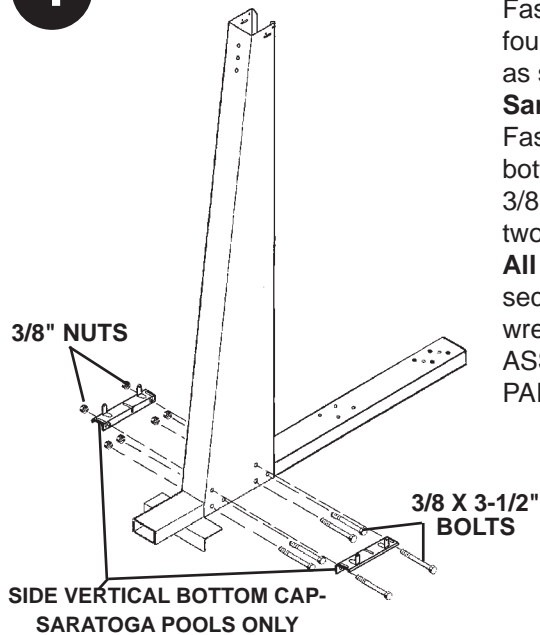


## 4 FASTEN VERTICAL TO GROUND SUPPORTS

Fasten the vertical using four (4) 3/8" bolts and nuts as shown.

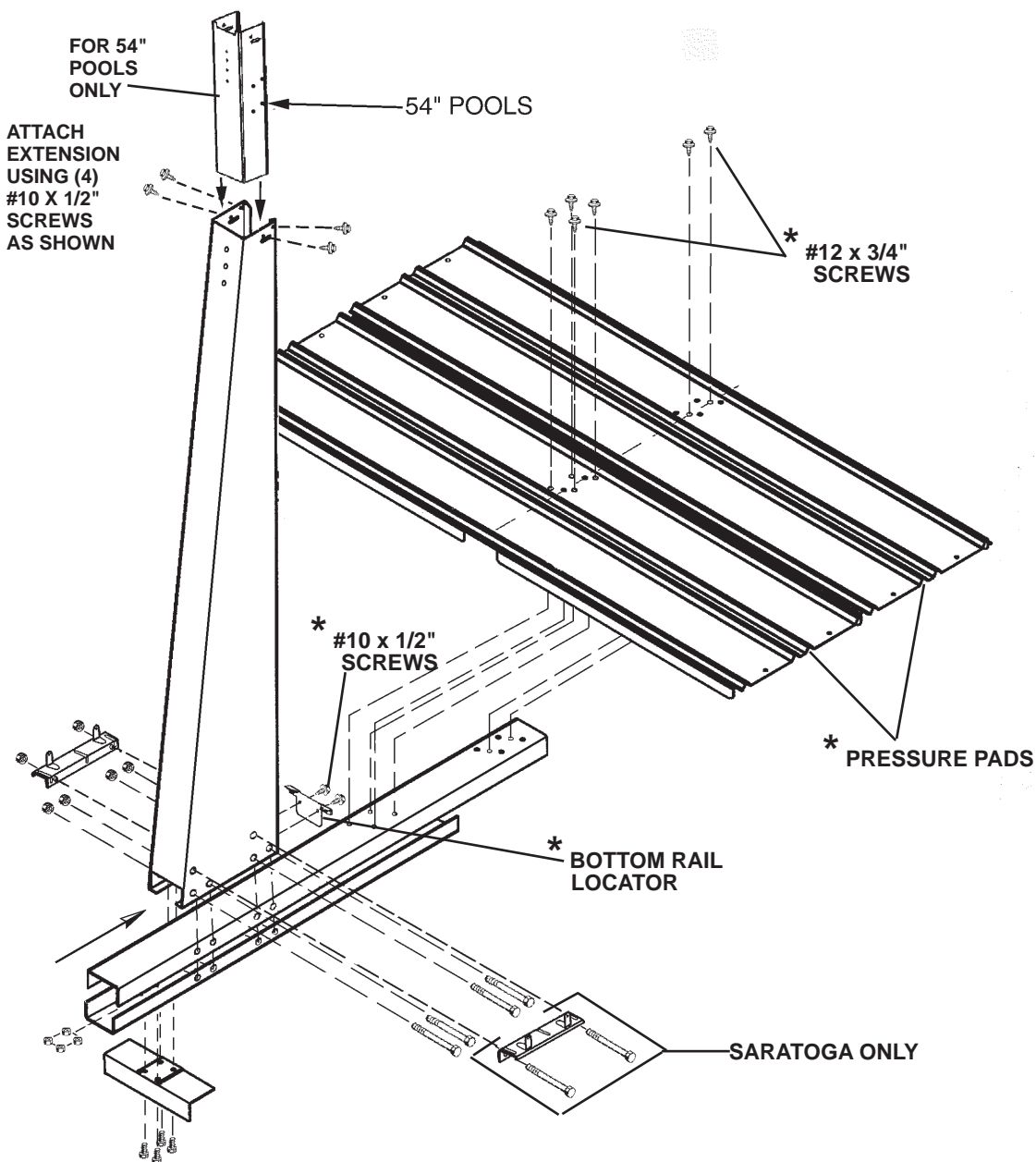
**Saratoga models only:** Fasten the side vertical bottom caps using two (2) 3/8" bolts and nuts in the two upper holes as shown.

**All Models:** Tighten securely using two 9/16" wrenches. **DO NOT ASSEMBLE ANY OTHER PARTS AT THIS TIME.**



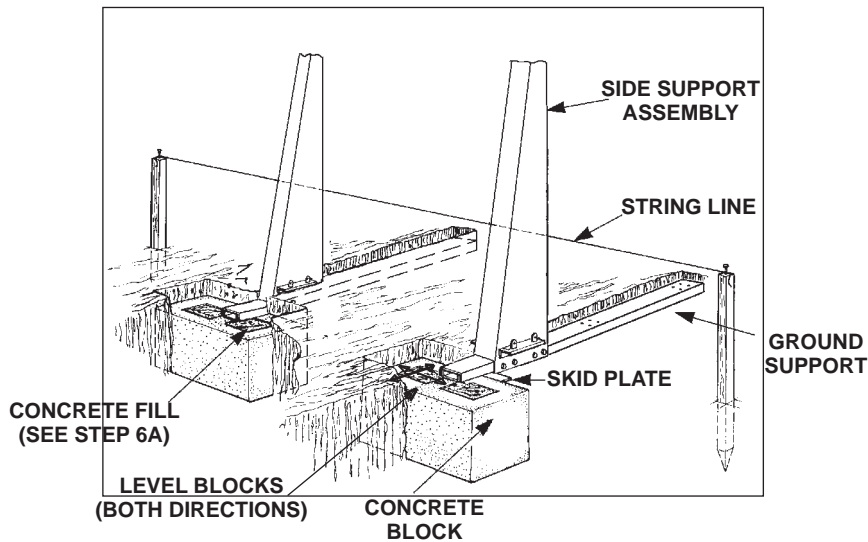
# FIG. A con't

## COMPAC II COMPLETE SIDE VERTICAL ASSEMBLY



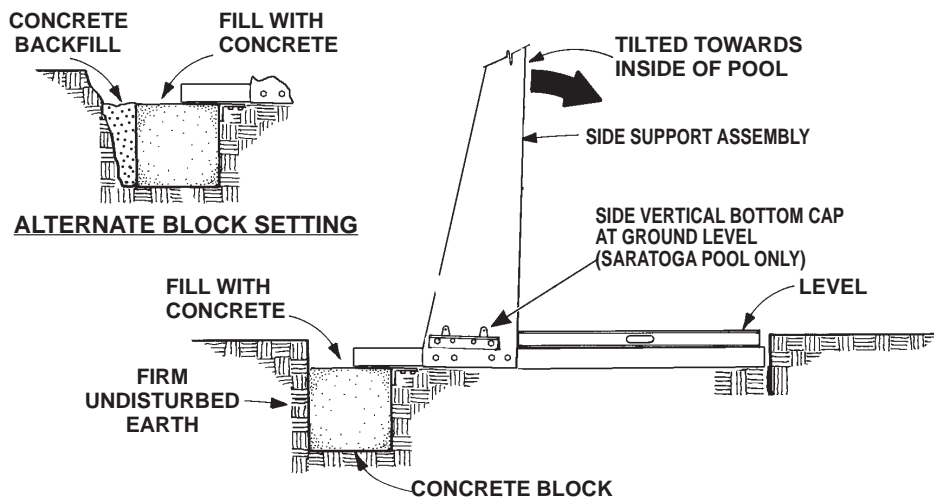
**\* TO BE ASSEMBLED LATER IN STEPS 8 & 9.**

## 6 INSTALL CONCRETE BLOCKS



Remove string line. Place concrete blocks into the excavations as shown. **NOTE: The thicker wall side of the cement blocks must face up.** Level the blocks in both directions. Place the assembled side supports into each trench with skid plate resting firmly against the face of the concrete blocks. Check each ground support for level (refer to Step 6A).

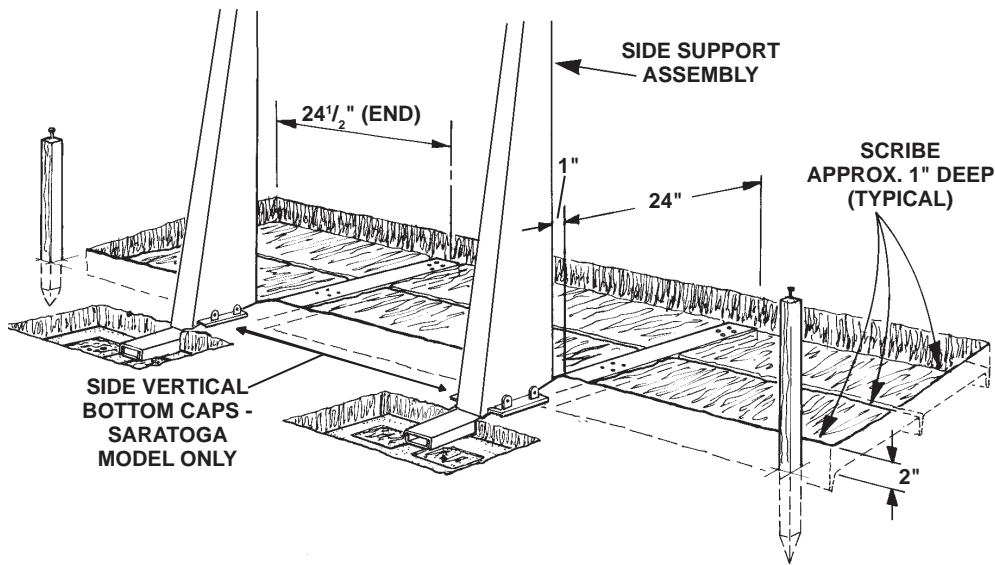
## 6A INSTALL CONCRETE BLOCKS



Position a 24" carpenter's level on top of the ground supports. Adjust the side vertical assemblies until the ground supports are level. When ground supports are level, the vertical 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 move outward and become vertical. Without this pre-load, the wall would tilt outward at the top and create a curve in the top rails. **Fill concrete blocks with concrete mix and level with top of blocks. If you have over-excavated, fill any space behind the blocks with concrete. See ALTERNATE BLOCK SETTING above.**

# 7

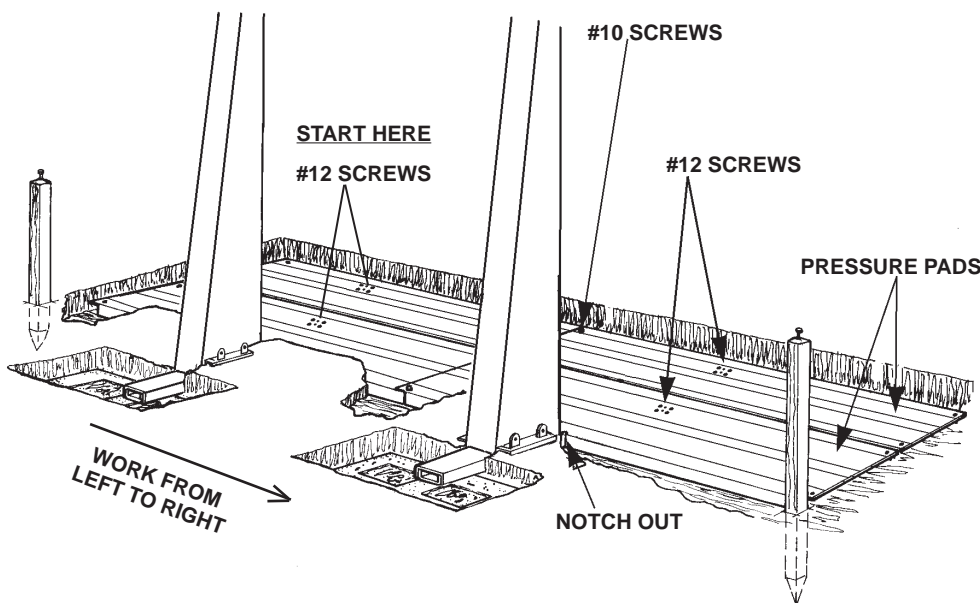
## DIG OUT FOR PRESSURE PADS



Dig out a trench to the dimensions shown above, grading to the ground support. Use a large screwdriver to scribe grooves (approximately 1" deeper) down each side and center of the trench to accommodate the pressure pads' flanges. Remove the excess dirt accumulated from scribing.

# 8

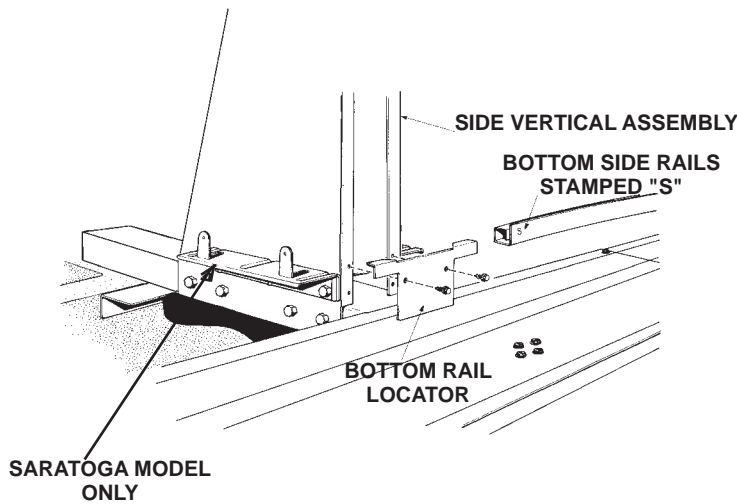
## INSTALL PRESSURE PADS



Keep the tops of the ground supports free of dirt. Working from left to right, assemble a set of pressure pads to each ground support using six (6) #12 x 3/4" screws as shown in Fig. A, (refer to your parts list as needed). Tighten screws firmly. Assemble each pressure pad set to its adjacent set using four (4) #10 x 1/2" screws. **DO NOT OMIT ANY SCREWS.** 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 pointing down into the scribed grooves.

# 9

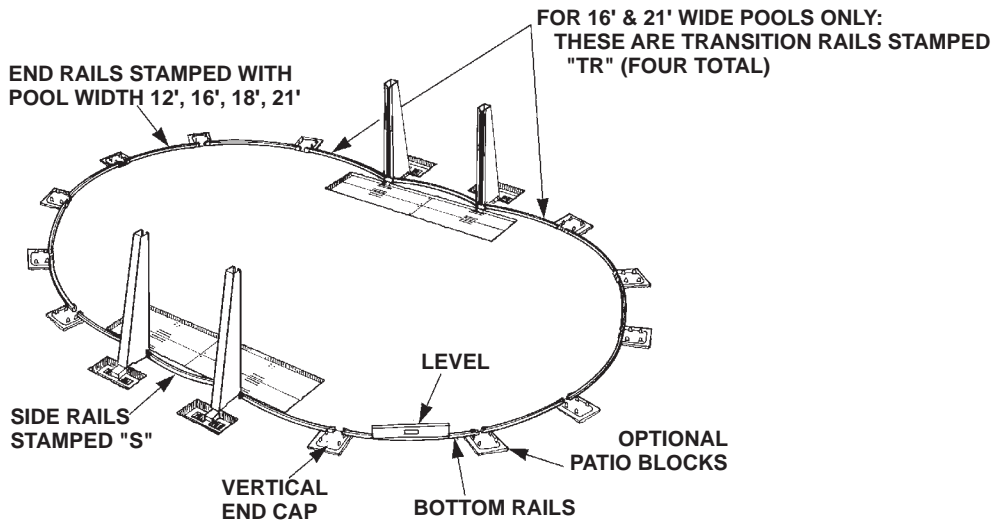
## INSTALL BOTTOM RAIL LOCATOR



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.

# 10

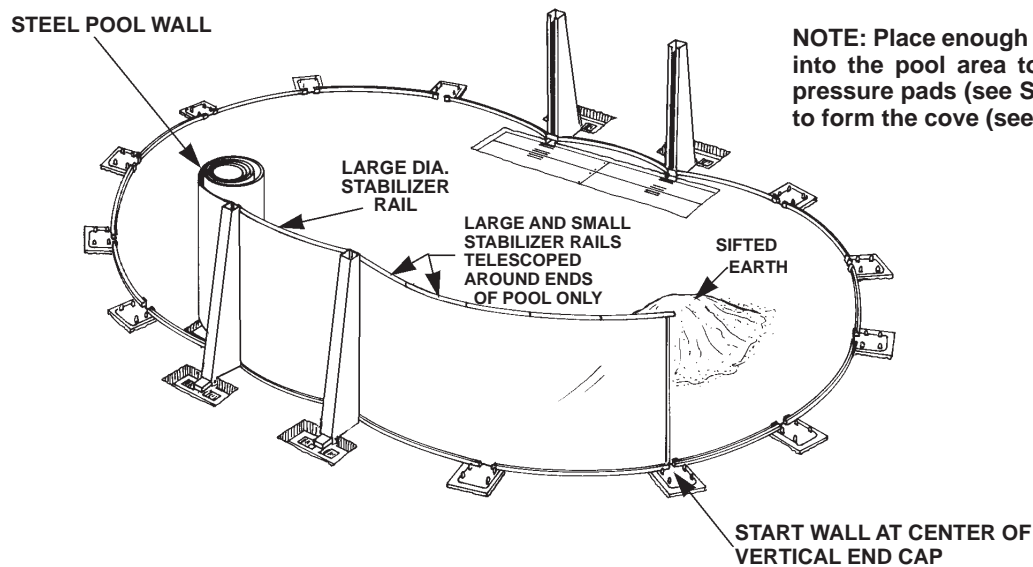
## INSTALL BOTTOM RAILS



Begin ends of framework by installing the four rails to the outside of the end side verticals (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. Remove patio blocks and lay them 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 moved 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.

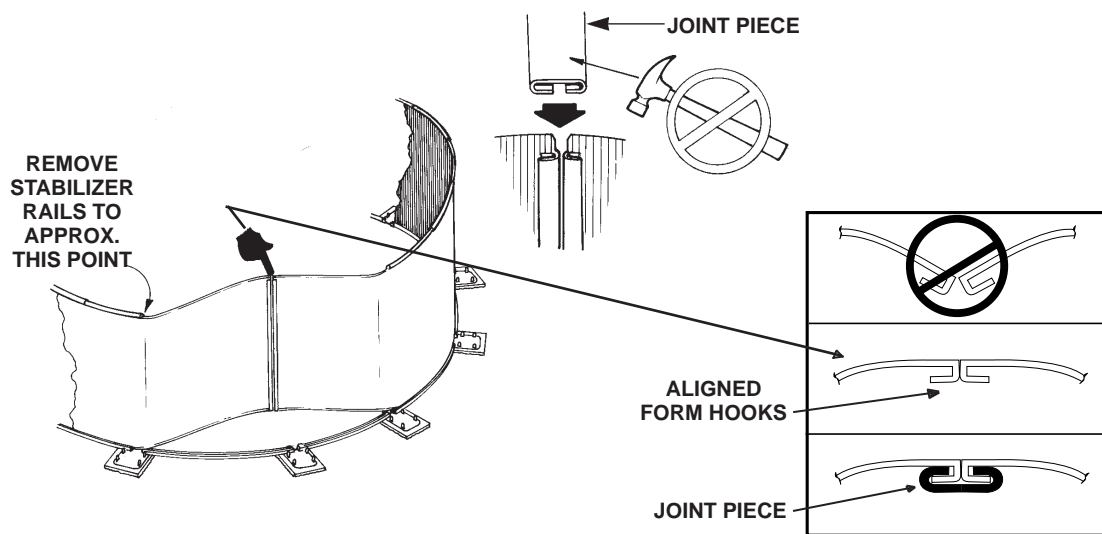


# 11 INSTALL WALL



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. Move the wall carton near the chosen starting point and remove the pool wall from its carton. To remove the wall, stand the carton upright (arrow Up on carton), and use a boxcutter to cut the bottom from the carton. Lift the box from the pool wall. Check that the "Up" arrow on the pool wall is pointing up. CAUTION: Keep hands and feet from under wall during installation. 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).

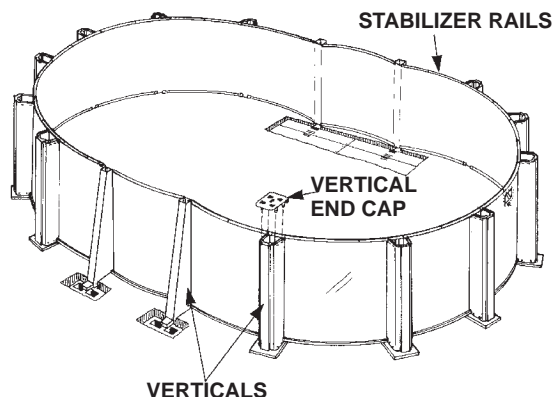
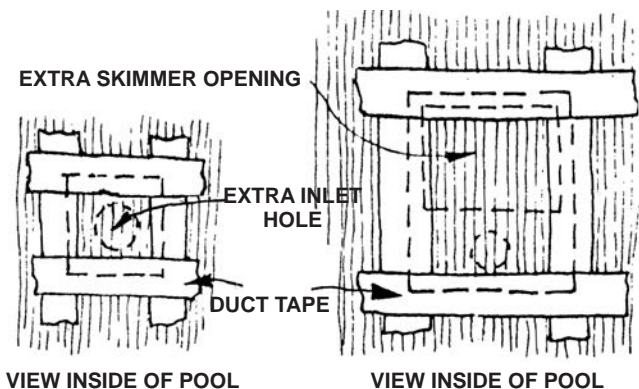
# 12 INSTALL WALL JOINT



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 the areas shown above. Move pool wall ends together inside the pool. Align formed hooks on wall ends and slide on joint piece(s) until the top is even with top of formed wall hooks. **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

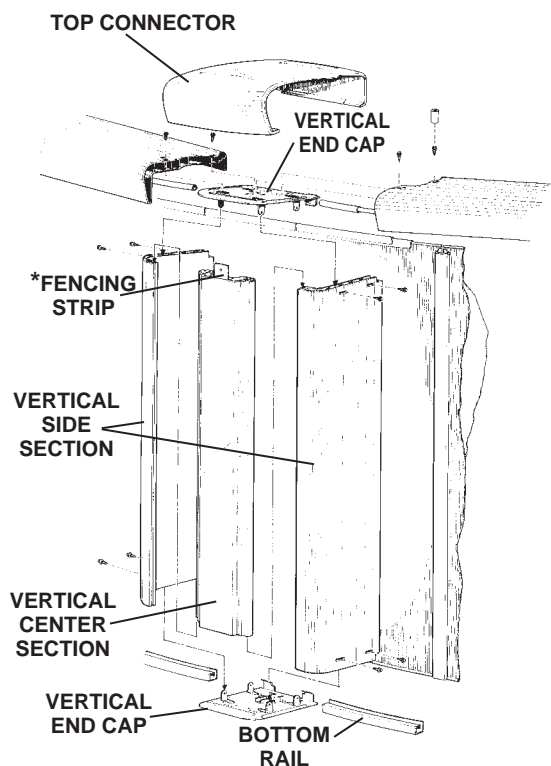
# 14 INSTALL VERTICALS



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.

Carefully follow the detail for your pool shown in either Figs. B, C, D, E or F to assemble the verticals and vertical end caps to pool. Use all necessary hardware. Refer to your pool parts list.

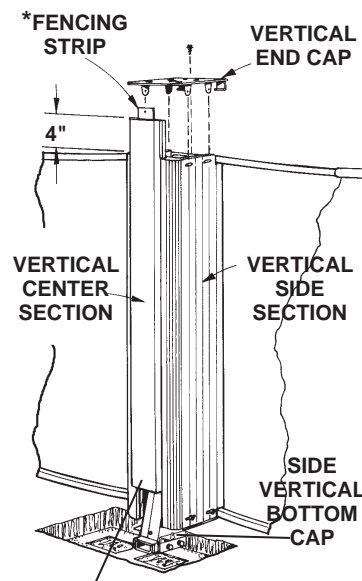
## FIG. B EXPLODED END AND SIDE SECTIONS - 10-1/2" RESIN - SARATOGA MODEL



\* Fencing strips packed with optional fencing.

### 10-1/2" END VERTICAL ASSEMBLY

**VERTICAL ASSEMBLY** - Slide each vertical center section down inside the grooves of two vertical side sections until flush. Place the vertical assembly over bottom vertical end cap (or side vertical bottom cap for side verticals) with the four tabs extending up inside the "Honeycomb" sections of both side sections, aligning with slots. **SIDE VERTICALS ONLY:** Leave approximately four inches of the center section extended above both side sections as shown at right. **ALL VERTICALS:** Push vertical assembly up against pool wall and secure with #10 x 1/2" screws through slots of side sections. **SIDE VERTICALS ONLY:** Push center section down flush with top. **ALL VERTICALS:** Insert fencing strip into slot of center section until flush with top (when installing optional fencing). Position top vertical end cap over stabilizer rails and insert the end cap's four tabs into the "Honeycomb" sections of both side sections, aligning with slots. Push vertical assembly against pool wall and secure with #10 x 1/2" screws through slots of side sections. Check to make sure bottom rails are "In" against "Stops" on bottom vertical end cap. After completing Step 16, assemble the top connector by lowering it over the end cap and aligning its inside locating tab with hole in end cap. Push it down firmly into place over the top rails. Refer to your pools parts list and this guide for parts identification.



**NOTE: SIDE VERTICAL CENTER SECTIONS ARE NOTCHED FOR CLEARANCE OVER THE SIDE SUPPORTS**

\* Fencing strips packed with optional fencing.

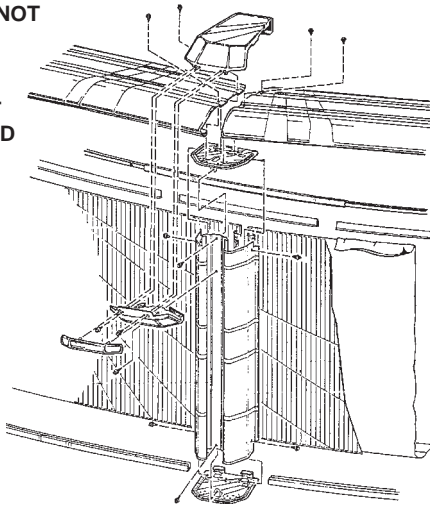
### 10-1/2" SIDE VERTICAL ASSEMBLY

# FIG. C

## PALM SHORE POOL

### EXPLODED END SECTION -CLASSIC 8-1/2"

PLEASE READ:  
IF YOUR POOL IS NOT  
PICTURED ON  
THIS ASSEMBLY  
GUIDE, REFER TO  
YOUR PARTS LIST  
FOR AN EXPLODED  
VIEW.



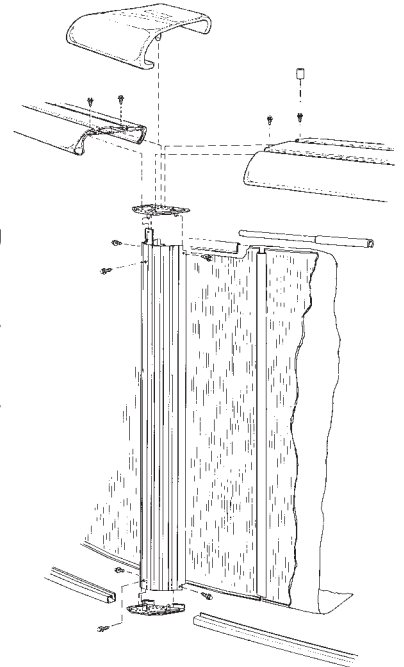
Three piece vertical assembly. Slide the center section (with two holes at top) down the grooves formed on each side section.  
**Special Note:** Special top connector assembly. After completing Step 16, attach vertical skirt to vertical, then attach top connector and decorative strip. Refer to your pools parts list and this guide for parts identification.

# FIG. D

## DESERT SPRING ,SAPPHIRE & PEARL RIVER POOLS

### EXPLODED END SECTION - 8" RESIN

After completing Step 16, assemble the top connector by lowering it over the end cap and aligning its inside locating tab with hole in end cap. Push it down firmly into place over the top rails. Refer to your pools parts list and this guide for parts identification.  
**Note:** Fencing strips packed with optional fencing.



PLEASE READ:  
IF YOUR POOL IS NOT  
PICTURED ON  
THIS ASSEMBLY  
GUIDE, REFER TO  
YOUR PARTS LIST  
FOR AN EXPLODED  
VIEW.

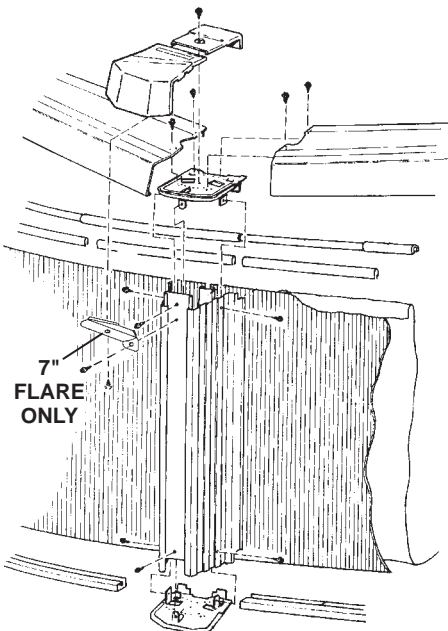
**PEARL RIVER POOL  
HAS DIFFERENT TOP  
CONNECTOR THAN  
SHOWN ABOVE**

# FIG. E

## SILVER LAKE & COPPER CANYON POOLS

### EXPLODED END SECTION - 6" & 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 this guide for parts identification. After completing Step 16, assemble two piece top connector by attaching inside connector to end cap with screw first, then slide outer connector onto inner connector. Refer to your pool parts list and this guide for parts identification.



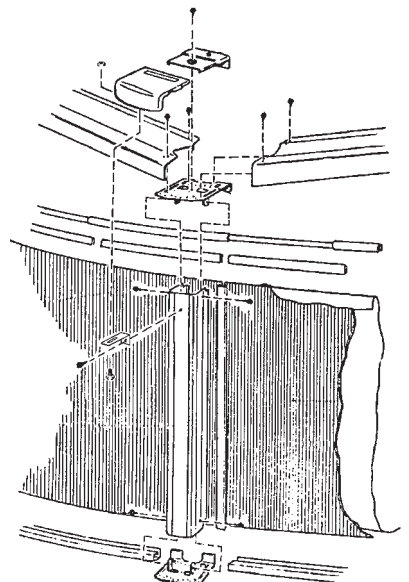
# FIG. F

## SUMMERVILLE POOL

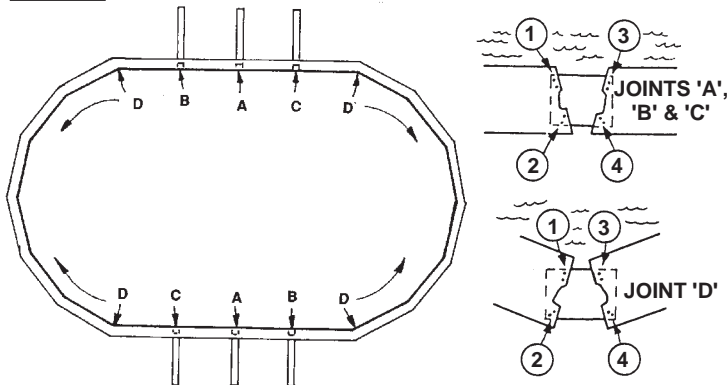
### EXPLODED END SECTION - 6" STANDARD

**Special Note:** Hole in face of vertical must be up.

After completing Step 16, assemble two piece top connector by attaching inside connector to end cap with screw first, then slide outer connector onto inner connector. Refer to your pool parts list and side 1 of this guide for parts identification.



# 15 TOP RAIL JOINTS



## 10-1/2" TOP RAILS

• There is one common top rail for 16', 18' & 21' wide pools. 12' wide pools use two sizes of top rails

## 8" & 8-1/2" TOP RAILS

• 16', 18', and 21' wide pools use one common top rail.

## 7" TOP RAILS

• 12' wide pools use two sizes of top rails. The longest top rails are used between the side vertical assemblies.

• 16', 18', and 21' wide pools use one common size top rail.

## 6" & 6-1/2" TOP RAILS

• 12' wide pools use one common size top rail

• 16' wide pools use two sizes of top rails. The shortest rails are used between the side verticals.

## ALL POOLS

There are four different joints where the top rails meet as shown. Refer to Step 16 for the correct attachment locations.

# 16 INSTALL TOP RAILS

HOLE CHART FOR 6" STANDARD & 6-1/2" FLARE RESIN TOP RAIL POOLS AUTUMN BREEZE & SUMMERVILLE POOLS								
12' & 16' POOL WIDTHS	JOINT A		JOINT B		JOINT C		JOINT D	
	12'	16'	12'	16'	12'	16'	12'	16'
Hole 1 - Top Rail	C	C	C	C	C	C	C	C
Hole 1 - End Cap	S/3	S/3	S/3	S/3	S/3	S/3	12	16
Hole 2 - Top Rail	18/24	18/24	18/24	18/24	18/24	18/24	C	C
Hole 2 - End Cap	S/3	S/3	S/3	S/3	S/3	S/3	12	16
Hole 3 - Top Rail	C	C	C	C	C	C	C	C
Hole 3 - End Cap	S/3	S/3	S/3	S/3	S/3	S/3	12	16
Hole 4 - Top Rail	18/24	18/24	18/24	18/24	18/24	18/24	C	C
Hole 4 - End Cap	S/3	S/3	S/3	S/3	S/3	S/3	12	16

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 correct holes before you assemble the top rails to the vertical end caps. Use four #10 x 1/2" screws to attach the top rails to the end caps. Insert screws through the correct hole in the top rail and screw into the correct hole on the end cap. From the chart, select the correct holes (stamped on top rails and end caps). Hole areas ① and ③ are toward inside the pool, ② and ④ toward outside the pool.

HOLE CHART FOR 10-1/2" TOP RAIL POOLS- SARATOGA POOL								
12', 16', 18', & 21' POOL WIDTHS	JOINTS A, B, & C				JOINT D			
	12'	16'	18'	21'	12'	16'	18'	21'
Hole 1 - Top Rail	S/12/16	S/12/16	S/12/16	S/12/16	S/12/16	S/12/16	C	C
Hole 1 - End Cap	S	S	S	S	12	16	18	21
Hole 2 - Top Rail	S/28	S/28	S/28	S/28	C	C	C	C
Hole 2 - End Cap	S	S	S	S	12/24	28/16	18	21
Hole 3 - Top Rail	S/12/16	S/12/16	S/12/16	S/12/16	S/12/16	S/12/16	C	C
Hole 3 - End Cap	S	S	S	S	12	16	18	21
Hole 4 - Top Rail	S/28	S/28	S/28	S/28	C	C	C	C
Hole 4 - End Cap	S	S	S	S	12/24	28/16	18	21

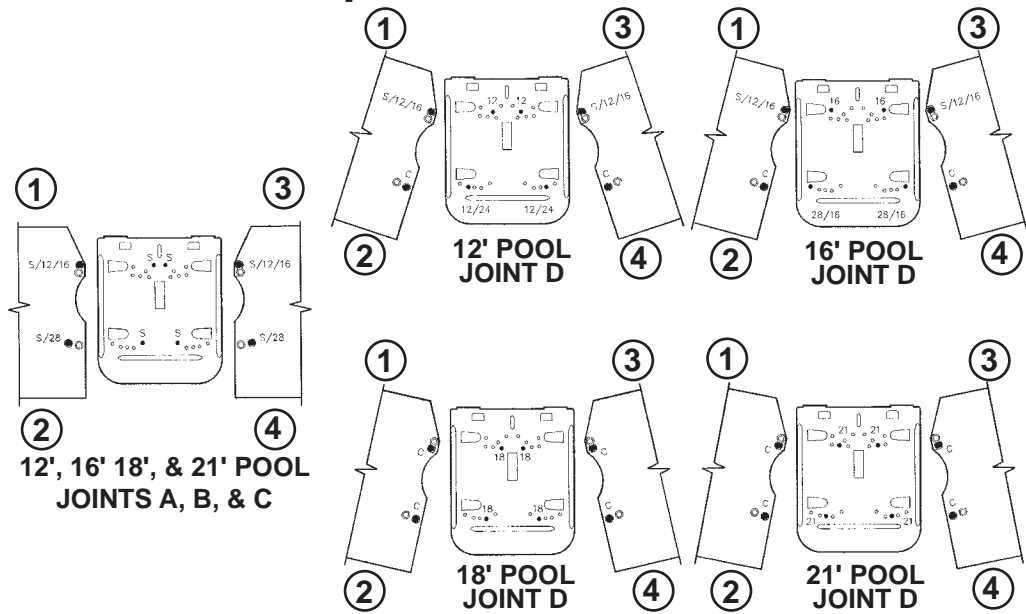
## EXAMPLE - 18' Wide Classic 8-1/2" Pool

To attach the top rails to the end cap in joint "C" for hole area ①, insert screw through the hole in the top rail marked "12/16" and screw into hole "S/1" in end cap. For hole area ②, insert screw through the hole in the top rail marked "C" and screw into hole "S/1" in end cap. For hole area ③, insert screw through the hole in the top rail marked "12/16" and screw into hole "C/1" in end cap. For hole area ④, insert screw through the hole in the top rail marked "C" and screw into "C/1" in end cap.

HOLE CHART FOR 8" RESIN & 8-1/2" TOP RAIL POOLS - DESERT SPRING, SAPPHIRE, PEARL RIVER & PALM SHORE																	
12', 16', 18' & 21' POOL WIDTHS	JOINT A				JOINT B				JOINT C				JOINT D				
	12'	16'	18'	21'	12'	16'	18'	21'	12'	16'	18'	21'	12'	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	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	C/1	C/1	S/1	C/1	S/1	C/1	12	16	18	21	
Hole 2 - Top Rail	C	C	C	C	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	C/1	C/1	S/1	C/1	S/1	C/1	12	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	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	S/1	C/1	C/1	C/1	C/1	C/1	12	16	18	21	
Hole 4 - Top Rail	C	C	C	C	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	S/1	C/1	C/1	C/1	C/1	C/1	12	16/28	18	21	

HOLE CHART FOR 6" FLARE & 7" FLARE TOP RAIL POOLS - COPPER CANYON & SILVER LAKE POOLS																
12', 16', 18' & 21' POOL WIDTHS	JOINT A				JOINT B				JOINT C				JOINT D			
	12'	16'	18'	21'	12'	16'	18'	21'	12'	16'	18'	21'	12'	16'	18'	21'
Hole 1 - Top Rail	C	C	C	C	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	C/2	C/2	S/2	C/2	S/2	C/2	12	16	18	21
Hole 2 - Top Rail	28	28	28	28	28	28	28	28	28	28	28	28	C	C	C	C
Hole 2 - End Cap	C/1	C/1	C/1	C/1	C/1	C/1	C/1	C/1	S/1	C/1	S/1	C/1	12	16	18	21
Hole 3 - Top Rail	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Hole 3 - End Cap	C/2	C/2	C/2	C/2	S/2	C/2	S/2	C/2	C/2	C/2	C/2	C/2	12	16	18	21
Hole 4 - Top Rail	28	28	28	28	28	28	28	28	28	28	28	28	C	C	C	C
Hole 4 - End Cap	C/1	C/1	C/1	C/1	S/1	C/1	S/1	C/1	C/1	C/1	C/1	C/1	12	16	18	21

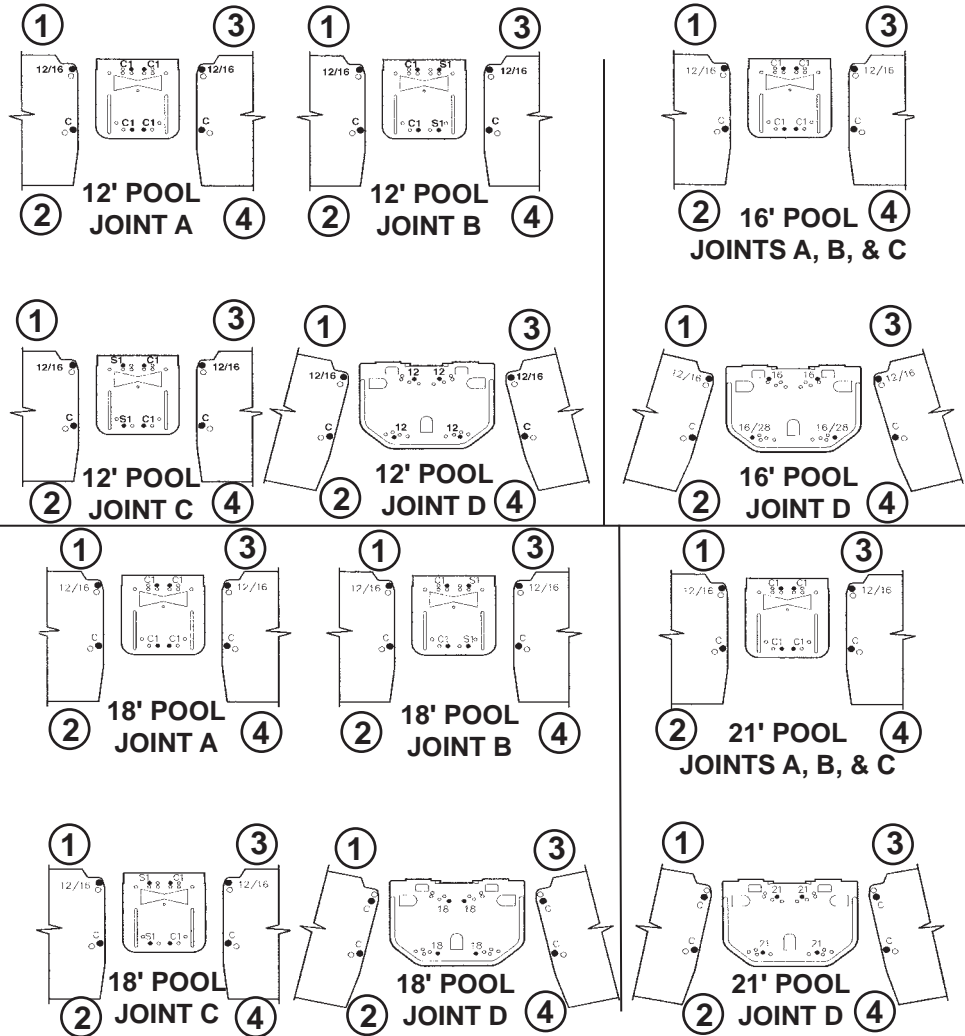
## 10-1/2" Resin Top Rail Pools - SARATOGA POOL



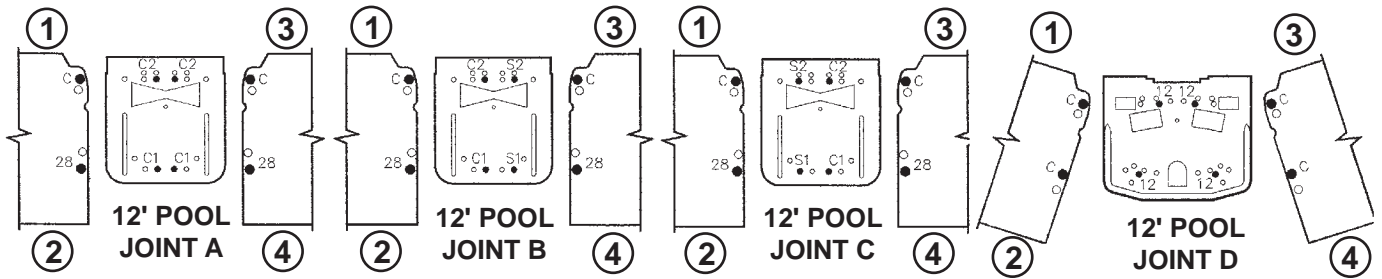
REFER TO PAGE 20 FOR TOP RAIL JOINT LAYOUT

12', 16', 18', & 21' POOL JOINTS A, B, & C

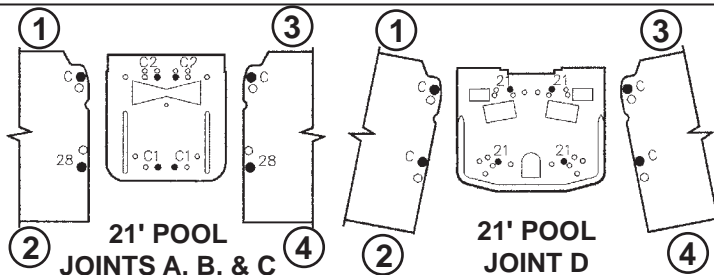
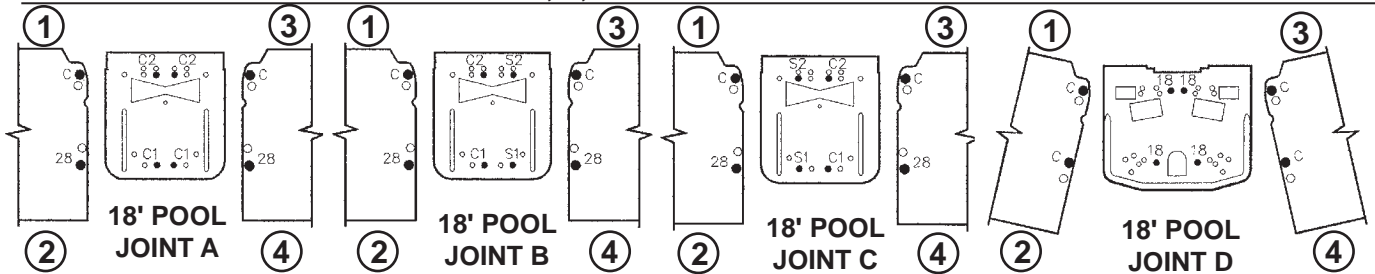
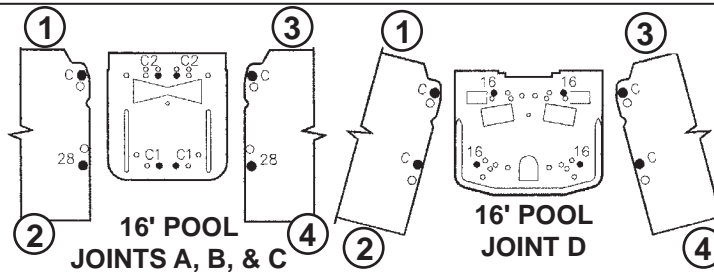
## 8" Resin & 8 1/2" Classic Pools - DESERT SPRING, SAPPHIRE, PEARL RIVER AND PALM SHORE POOLS



## 6" Flare and 7" Flare Pools - SILVER LAKE AND COPPER CANYON POOLS

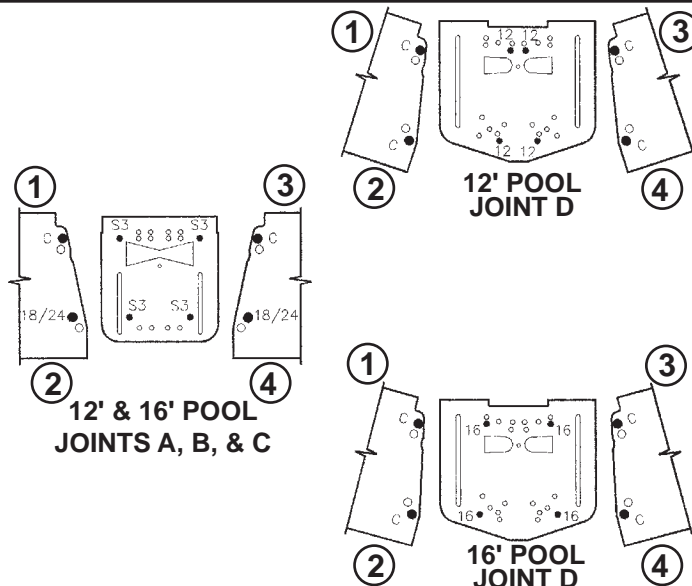


REFER TO  
PAGE 20 FOR  
TOP RAIL  
JOINT  
LAYOUT

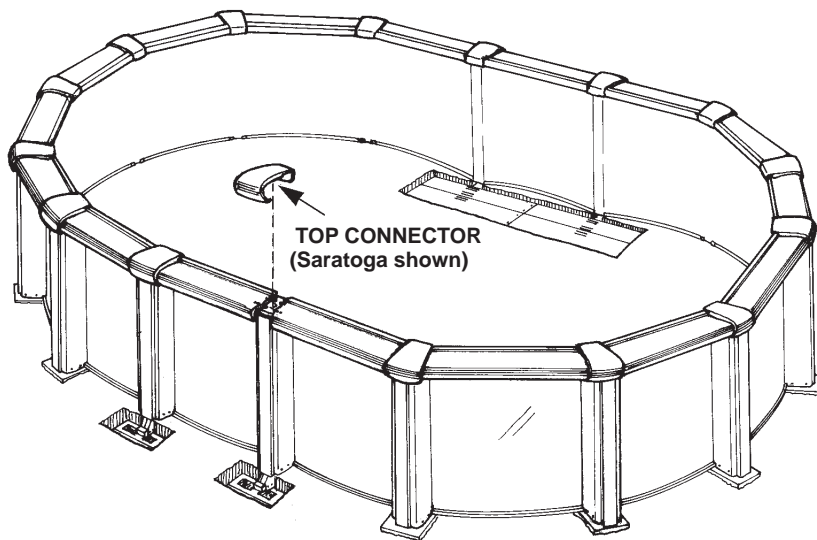


## 6" Standard & 6-1/2" Flare Resin Pools - SUMMERVILLE, AUTUMN BREEZE POOLS

REFER TO  
PAGE 20 FOR  
TOP RAIL  
JOINT  
LAYOUT

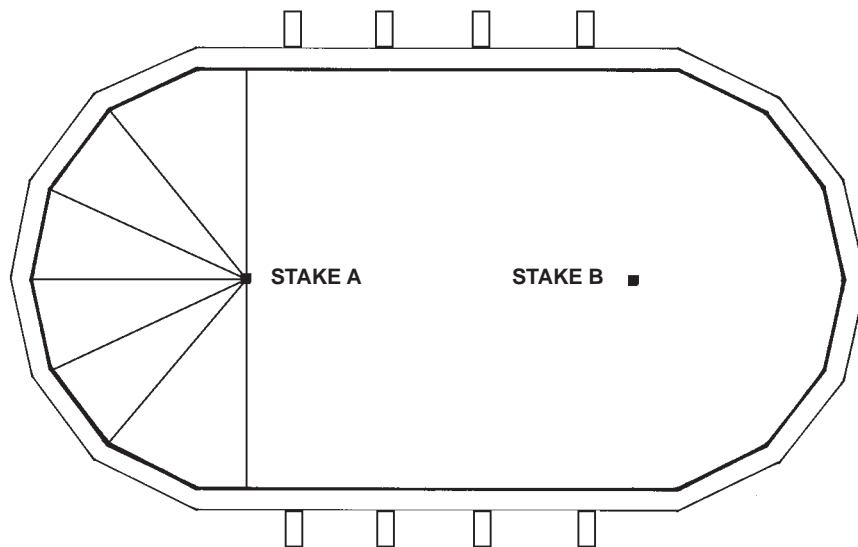


## 17 ATTACH TOP CONNECTORS



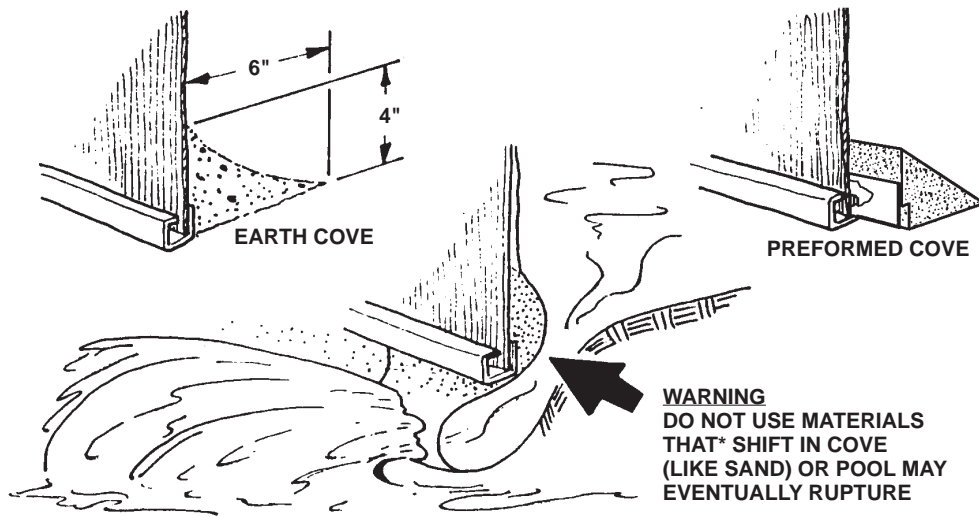
Attach all hardware and brackets and top connector as shown in detail of your pool. Refer to Figure B, C, D, E, or F.

## 18 CHECK WALL RADIUS



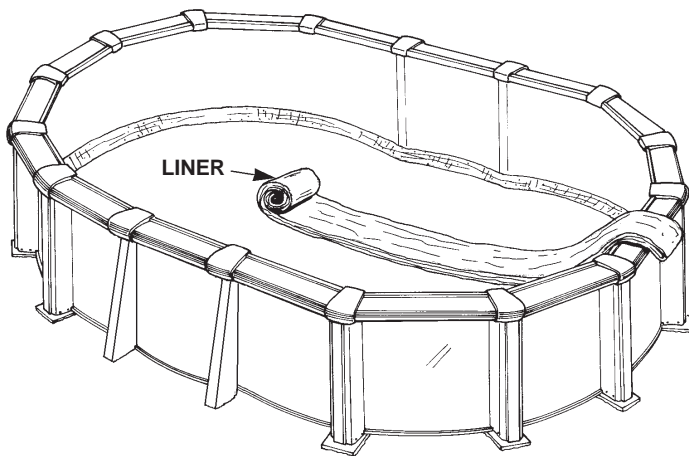
**Important Step:** At this time, fill in all excavations on outside of pool. Cover inside pressure pads and horizontal beams with approximately 3" of damp sifted earth; tamp and blend to bottom of pool. Check pool framework to assure level installation. Place the level on each top rail, working gradually 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!** Use level to check vertical positioning of verticals. Using Stake A as center point, measure from stake to pool wall to assure roundness of ends. Measure to the wall at each connector at pool end as shown above. Distance should be equal at all points. Follow same procedure using Stake B as center point for opposite end.

# 19 COVE

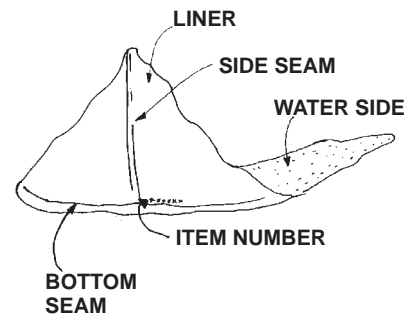


**Important Step:** The cove is a vital structural element that prevents water pressure from forcing the pool liner out under the bottom rail. The manufacturer will not assume responsibility should the cove be omitted. **EARTH COVE:** Use screened damp earth to form a cove around the inside base of pool 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.**

# 20 LINER SEAM POSITIONING



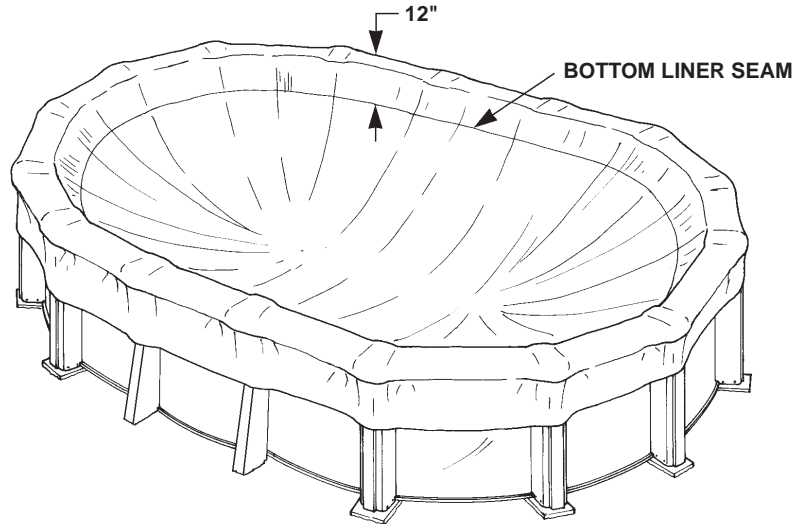
**IMPORTANT: BEFORE PROCEEDING TO STEP 21, MAKE SURE LINER ITEM NUMBER MATCHES THE ITEM NUMBER ON THE LINER CARTON. THE ITEM NUMBER IS LOCATED ON THE SMOOTH SIDE OF THE LINER AT THE INTERSECTION OF THE SIDE SEAM AND BOTTOM SEAM.**



Remove all stakes. Check the pool floor (area inside pool wall) for levelness. For excavated pools, check flatness of sloping areas with 2" x 4" board. Fill in all slight depressions with sifted earth and tamp. Remove all stones and sharp objects. Fill in all footprints on pool floor. **NOTE: If you intend to install an E-Z Clip Liner, follow the instructions packed with it at this time and disregard steps 21 through 25 on this sheet.** Place liner on top of top rail (at shallow end if excavated pool). The loose end should overhang outside of pool by about 12 inches. Hold end and unroll liner down middle of pool as you would a carpet. The center seam of the liner must be positioned at the center line of the pool for 12 and 21-foot wide pools. For 16 and 18-foot wide pools, position the center liner section (not the seam) at the center line of the pool. For excavated pools, the center seam or center section of the liner must begin at the shallow end and run along the center line of the pool to the deep end. **Note:** The embossed side and/or the printed side of the liner will be the water side.



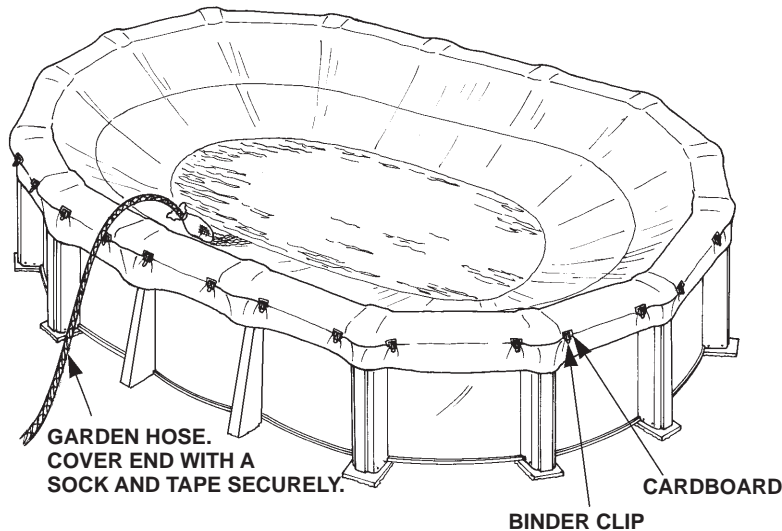
# 21 STRETCH LINER



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 6" to 12" 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 from the top rails. Correct any bunching or pleating conditions in the liner wall. Inspect liner for open seams. If any are found, return liner to dealer for prompt replacement.

# 22 FILL POOL

**BINDER CLIP & 3" X 3" PIECE OF CARDBOARD TO PROTECT LINER FROM BEING SNAGGED BY CLIP**



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 stretch 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 too 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 with no wrinkles. Continue monitoring the liner tension as the water is approaching and covering the cove area of the pool.

## 22 con't 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 reclamp 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.

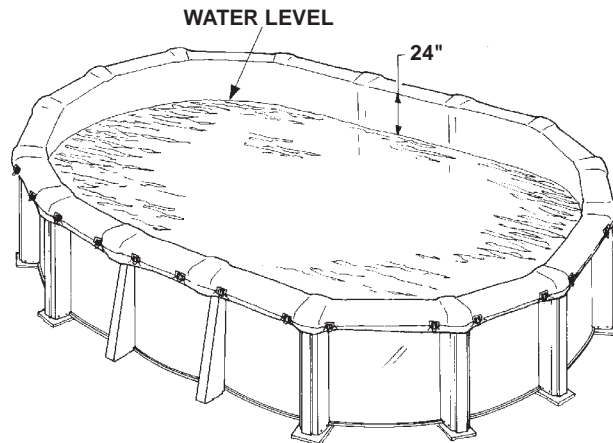
### Filling Deep Excavated Pools (stretch-in liners only):

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 or 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 other 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.

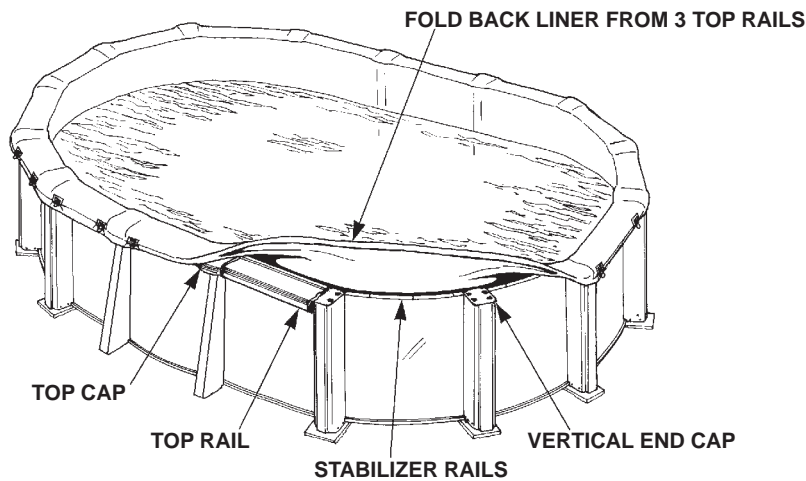
**Liner Replacement:** If you decide to replace the liner, you must have the replacement liner at the pool site and ready for immediate installation. DO NOT leave the pool standing without a liner. Do not attempt to install the replacement liner on a windy day. Severe wind damage to your pool may result.

## 23 CONTINUE FILLING POOL



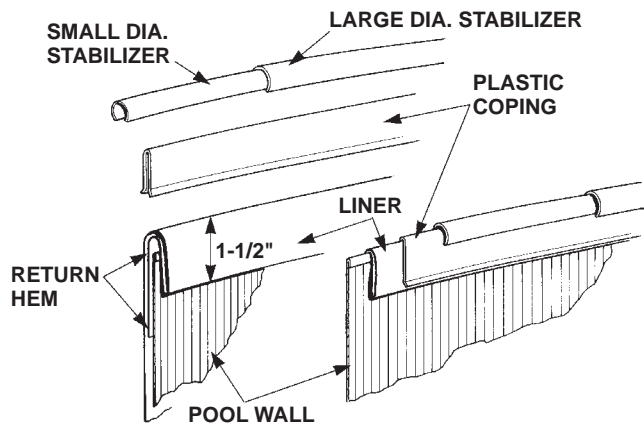
Continue filling pool. **Never allow liner to fall back into pool.** Water between the liner and wall can cause pool failure. When pool has approximately 24 inches of water, stop filling. Do not resume until Steps 24, 25 and 26 are completed. **CAUTION:** Do not cut any openings into liner at this time.

# 24 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 caps, three top rails, two vertical end caps and stabilizer rails. REMEMBER, NEVER ALLOW LINER TO FALL BACK INTO POOL.

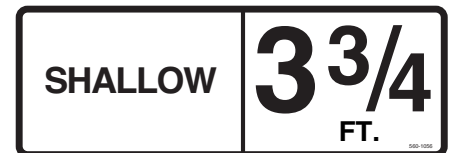
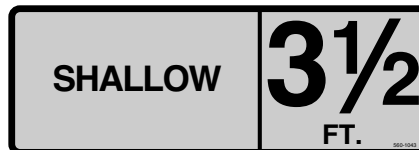
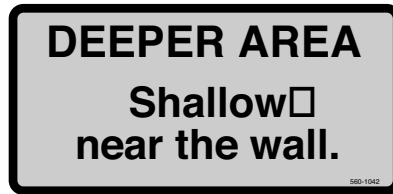
# 25 INSTALL COPING AND STABILIZER RAILS



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. One large diameter stabilizer rail fits between each pair of side supports. They DO NOT telescope.

**NOTE:** 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 24. 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.

# 26 READ ME FIRST FOR POOL SAFETY BOOKLET • WARNINGS • LABELS • SIGNS



With pool completely assembled, install skimmer, filter, etc. using the instructions provided with those units. Finish filling pool to the correct level as indicated on your skimmer face plate.

Now that you have installed your new pool, Doughboy Recreational 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.

We have also provided you with an assortment of signs and decals. Safety decals and caution information provided with your pool have been endorsed by the U.S. Consumer Product Safety Commission. **It is mandatory that the pool owner and installer follow the installation and use directions for all provided safety signs and decals. We have also provided you with a booklet titled "Read Me First for Pool Safety", which will give you a detailed description of where and how to apply your safety decals and signs.** 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 for Pool Safety", 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 of charge by contacting Doughboy's Customer Service Department: Doughboy Recreational • 315 No. Sebastian St. • West Helena, AR 72390 or by calling toll free: (877) 228-4586.

**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 or entry system to enter or exit your pool. Never attempt to swim or reach behind ladders or any other pool entry system. 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. Juveniles must be supervised at all times by a responsible adult as directed by the U.S. Consumer Product Safety Commission.** 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.