

TYPHOON

SLIDE OWNERS MANUAL

S.R. Smith™



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INTRODUCTION

S.R. SMITH TYPHOON SLIDES ARE DESIGNED AND MANUFACTURED FOR INSTALLATION AND USE ON IN GROUND SWIMMING POOLS ONLY. S.R. SMITH TYPHOON SLIDES ARE NEVER TO BE INSTALLED AND USED ON HOUSEBOATS, BOAT DOCKS, FLOATING DOCKS OR PLATFORMS, OR OTHER BODIES OF WATER SUCH AS LAKES, PONDS, RIVERS, ETC. PROPER AND COMPLETE ASSEMBLY, USE AND SUPERVISION IS ESSENTIAL FOR PROPER OPERATION AND TO REDUCE THE RISK OF ACCIDENT OR INJURY.

APPLICABLE STANDARDS AND CODES

The installation of the Typhoon must comply with all applicable governmental and building codes.

ASSEMBLY AND INSTALLATION

All S.R. Smith Typhoon slides are inspected prior to shipment from the factory. Proper assembly and installation is mandatory. Improper assembly and installation voids S.R. Smith's warranty and may affect the safety of the user. S.R. Smith cannot and does not guarantee customer's deck.

DRAWINGS

All drawings in this Slide Owner's Manual (**FIG.'S 1 through 6**) are for illustration purposes only and are NOT TO SCALE.

SUBSEQUENT OWNERS

The Owner's Manual must remain with the owner of the slide. If the owner changes, the Owner's Manual shall be brought to the attention of the new owner.

MANUFACTURER'S PLACEMENT INSTRUCTIONS

The Typhoon owner must confirm that the Manufacturer's Placement Instructions have been followed by the Installer.

1. The critical dimensions for placement of the **Typhoon** are as shown in FIG.'S 1 and 2.
 - A. The slide exit runway surface shall not exceed twenty inches (20") above the water surface as shown in **FIG.1**.
 - B. The slide shall be positioned so that all water flowing off the runway exit drops into the pool. Recommended overhang is (4") inches.
 - C. The minimum depth of water below the exit lip of the slide shall be three feet (3') and increases to four feet six inches (4'-6") at Pt. A, which is a distance of four feet six inches (4'-6") from the exit lip of the slide as shown in **FIG.1**.
 - D. A minimum depth of four feet six inches (4'-6") shall be maintained at a distance of nine feet (9') along the extended centerline of the slide from Pt. A. as shown in **FIG.1**.

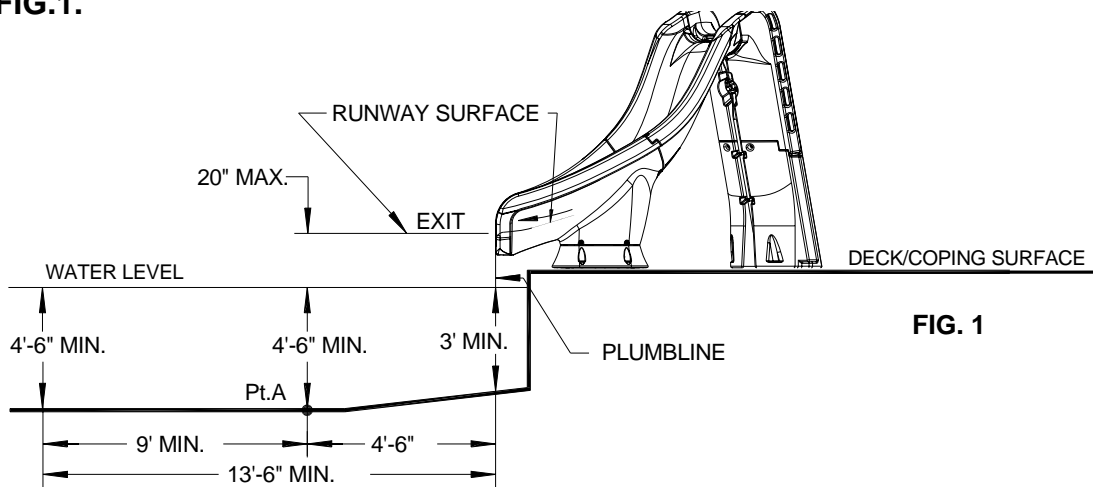


FIG. 1

2. A minimum clearance area in front of the slide shall be maintained at all times as follows:

- A. The minimum clearance distance on either side of the extended centerline of the slide runway shall not be less than three feet six inches (3'-6") at a point no less than two feet six inches (2'-6") from the exit lip of the slide and extending a distance of thirteen feet six inches (13'-6") in front of the slide as shown in **FIG.2**.

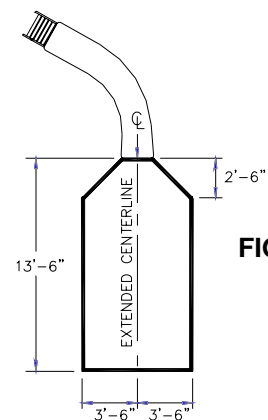


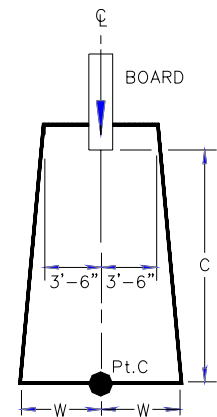
FIG. 2

B. The minimum clearance area in front of a properly installed diving board on an inground swimming pool is a minimum distance of three feet six inches (3'-6") on either side of the board's centerline as shown in **FIG. 3**. Pt. C extends a minimum distance of "C" from the tip end of the board as shown in **FIG.3**. The width distance "W" on either side of Pt. C is given in **CHART 1** and shown in **FIG.3**.

CHART 1

BOARD MINIMUM CLEARANCE AREA		
POOL TYPE	"C" DIMENSION	"W" DIMENSION
I	14'-6"	5'-0"
II	14'-6"	6'-0"
III	16'-6"	6'-0"
IV	18'-6"	7'-6"
V	21'-0"	7'-6"

See Article 5 contained in ANSI/NSPI-5 2003 STANDARD FOR RESIDENTIAL INGROUND SWIMMING POOLS and refer to FIGURE 3 and Table 1 for Minimum Water Envelope Dimensions AB, BC and Width at Point C.



BOARD
MINIMUM CLEARANCE AREA

FIG. 3

"C" DIMENSION FOR BOARD = AB + BC

"W" DIMENSION FOR BOARD = WIDTH AT PT.C

C. The minimum clearance area of a slide or diving board shall not intersect any coping or rope and float line as shown in **FIG.4**. The minimum clearance area of a slide or diving board may intersect each other provided that they are not used simultaneously.

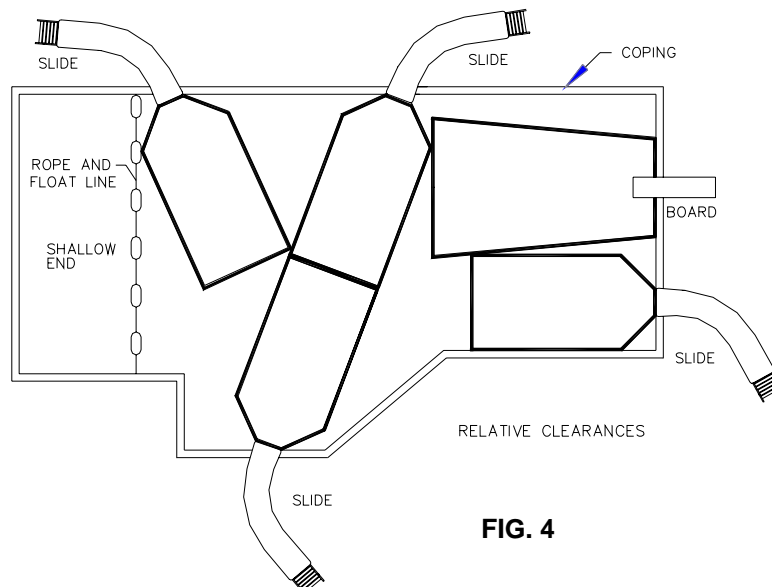
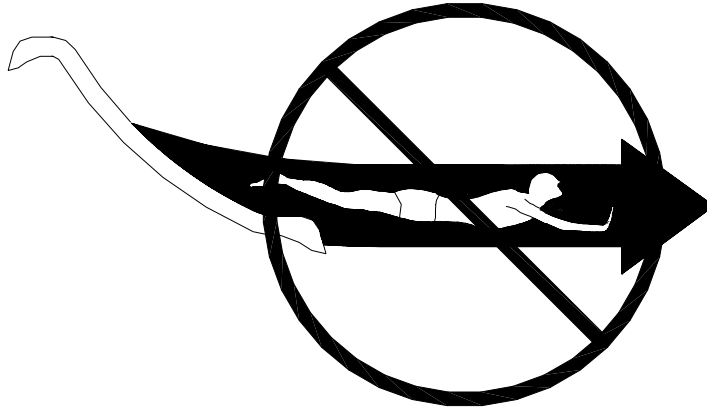


FIG. 4

INSTALLED TYPHOON STRUCTURAL & INSTALLATION CHECKLIST



DO NOT SLIDE HEAD FIRST

After installation and prior to the first use of the Typhoon and periodically (see DAILY/WEEKLY MAINTENANCE OF THE TYPHOON) thereafter the owner must:

1. Inspect the runway for visible cracks or tears.
2. Inspect the ladder for sharp edges, protrusions, cracks or tears.
3. Inspect ladder and pedestal mounting areas for loose or corroded fasteners.
4. Measure the following dimensions and compare with the Manufacturer's Placement Instructions on pages 3 and 4.
 - Measure the depth of water in front of the slide exit. (4-6") min. depth at a distance of (4-6") from exit end of slide.
 - Measure the height of the slide runway exit above the water. (20" max.)
 - Measure the distance between the slide centerline and the edge of other pool equipment.
5. Observe the position of the exit of the slide as shown in **FIG.'S 1, 2 and 4** on pages 3 and 4.
6. Read, understand and enforce all safety and use instructions on the slide.

INTENDED USE INSTRUCTIONS

**** IMPORTANT ****

READ AND FOLLOW THE SIMPLE SAFETY RULES BELOW.

MAKE SURE THAT EVERYONE WHO USES THE TYPHOON KNOWS AND FOLLOWS THESE RULES.

ENFORCE THESE RULES WITH ADULT SUPERVISION

Installed and used properly, the Typhoon will give you, your family, friends and guests many hours of enjoyment. Like any other piece of equipment however, the Typhoon can be misused in such a way as to cause the user injury, even serious and crippling injury. As the owner of a Typhoon it is your responsibility to do the following:

1. Only one person allowed on the slide at any given time.
2. Roughhousing or horseplay on the slide is strictly forbidden.
3. Do not use the slide as a diving platform. The slide is made for sliding only, not diving. **NEVER DIVE FROM ANY PART OF THE TYPHOON.**
4. Familiarize yourself with the shape of the pool bottom and the water depth before you slide. Use the correct slide configuration shown on the ladder when sliding.
5. Avoid sliding until all submerged obstacles, surface objects or other swimmers are clear of the slider's pathway.
6. Do not slide into obstructions such as inner tubes, people, water toys, etc., as this increases the potential for a crippling injury to occur.
7. Don't drink alcoholic beverages and slide.
8. Don't slide alone; use the buddy system.
9. The slide is a water slide and should be installed only according to the instructions on pages 3 and 4 of this manual. Don't allow children to use the slide without adult supervision. Users must be swimmers.
10. Take your time in preparing to slide. Move forward slowly and get yourself positioned properly before starting the slide.
11. Handicapped persons should use caution and may require assistance.
12. Do not use the slide if any part of it becomes damaged, weakened, or broken. Don't take chances. Have the slide inspected and, if necessary, repaired by a competent professional, who is familiar with water slides before using the Typhoon slide again. See INSTALLED SLIDES' STRUCTURAL & INSTALLATION CHECKLIST on page 5.
13. Individuals who exhibit frailty due to age should not use the slide.
14. People with history of back problems, heart conditions or fear of heights should not use the slide.
15. People who weigh over 275 pounds should not use the slide.
16. Women who are pregnant should not use the slide.
17. Don't use any other sliding technique, other than the following: see FIG. 5.
18. Hold onto handrails at all times.

SITTING SLIDE POSITION

In the sitting slide position, face forward on the slide holding the legs and arms straight out with the palms of your hands tilted upward as shown in **FIG. 5**.

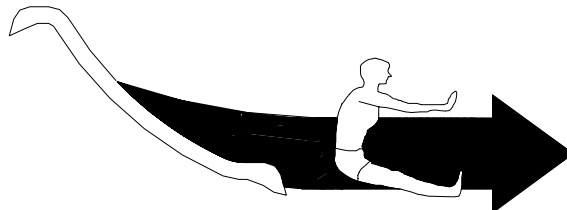


FIG. 5

**** IMPORTANT ****

In order for a person to minimize the possibility of injury, **HEAD FIRST SLIDES ARE STRICTLY PROHIBITED.** (see FIG. 6) It is necessary that the user know that the chief danger of this type of slide is serious spinal injury. Injuries to the spine may result in temporary or permanent paralysis or even death. Research studies have shown that you cannot rely on the water to slow you down sufficiently to avoid injury.

As a Typhoon owner, it is your responsibility to explain the nature of this danger to all persons who may use your Typhoon, since they may not otherwise appreciate the dangers of performing head first slides.

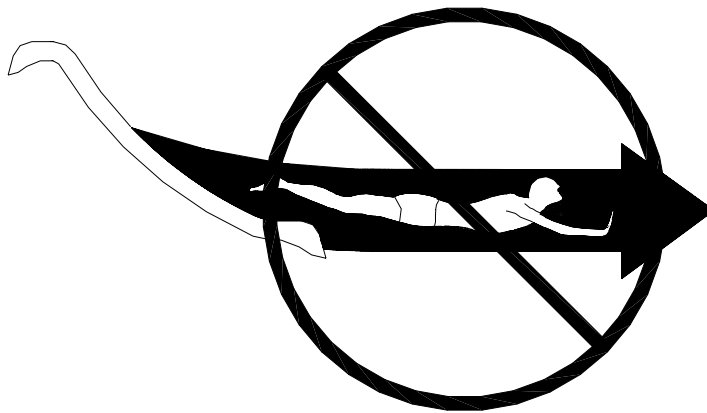


FIG. 6

DO NOT SLIDE HEAD FIRST

DAILY/WEEKLY MAINTENANCE OF THE TYPHOON

1. When hosing down the deck, hose your Typhoon to wash away any dust, dirt or other debris, which may have accumulated.
2. Be sure that all connections are secure. Tighten hardware if necessary.
3. All polyethylene parts require little maintenance. Hose and wipe to clean. While cleaning slide, check and see that all nuts and bolts are tight and secure.
4. Inspect the runway for visible cracks or tears, sharp edges and protrusions.
5. Inspect all attachment flanges for loose or corroded fasteners.
6. Inspect all ladder tread or step-attachment points for evidence of shear, bending yield, or fatigue in the ladder steps, rails, or attachments means. Yield is evidenced by crystallization or fine cracking of the ladder tread and/or surface.
7. Inspect the ladder handrails for rigidity and attachment.

CLEANING INSTRUCTIONS

Use nonabrasive soap and water when possible. In addition, you may safely use the below listed products. Always try a test spot before applying to a large area.

Windex® With Ammonia
Soft Scrub®
Glass Plus®

Formula 409®
Scrubfree
Topjob®

Fantastik®
Tackle®
Tilex®

Always read the label instructions on any cleaner carefully before applying it to a *polyethylene* surface.

AVOID HARSH CHEMICALS AND DISINFECTANTS. DO NOT USE:

Dow with Scrubbing Bubbles®
Windex® With Vinegar

Lysol® Disinfectant
White Cap®

Ajax® Cleanser
Ajax® Liquid

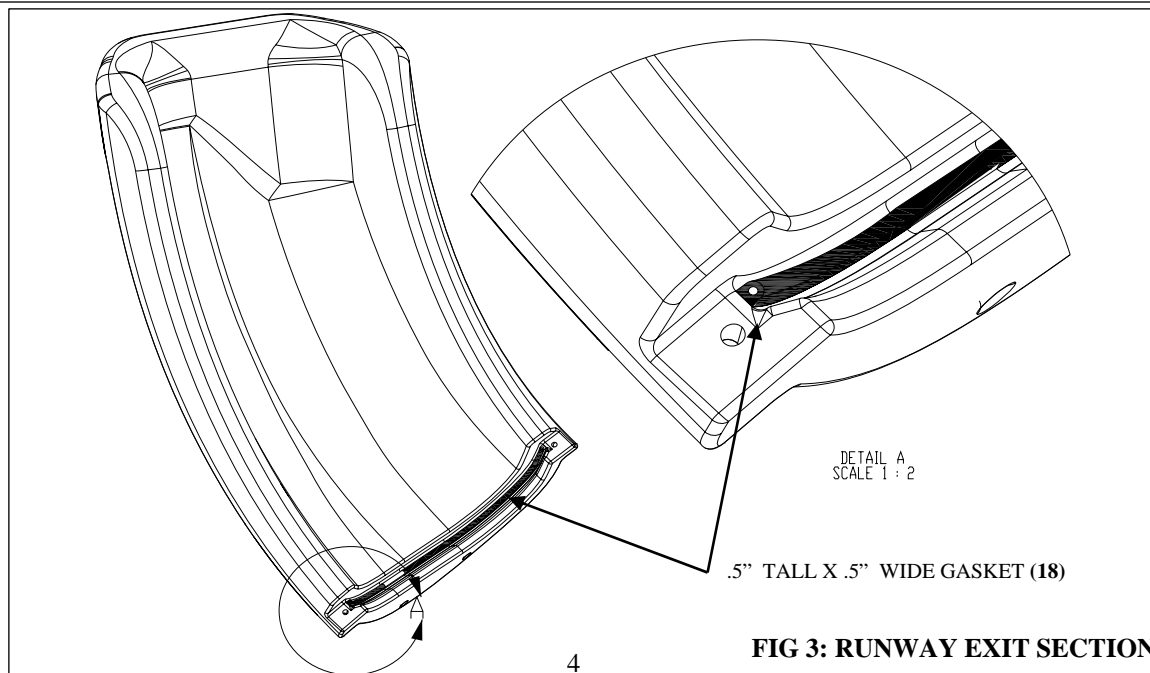
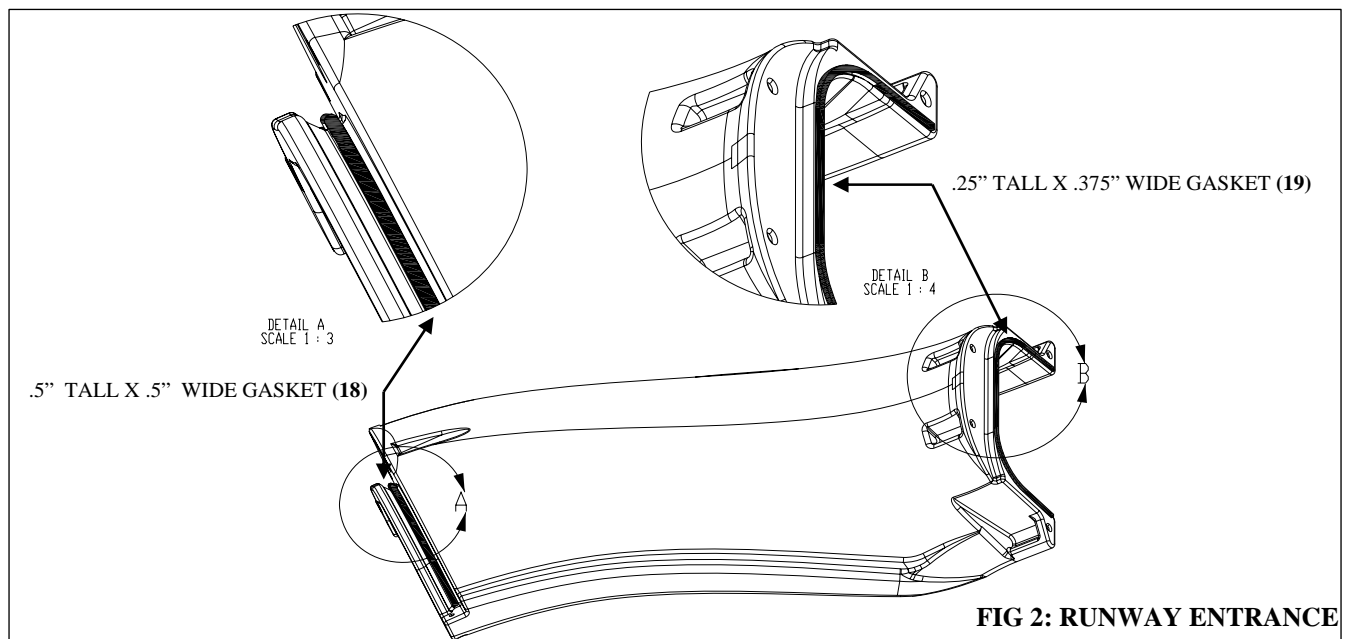
ASSEMBLY INSTRUCTIONS

Tools Required:

1. Ratchet handle
2. 9/16" deep socket
3. 9/16" wrench
4. 3/4" socket or wrench
5. 7/32" allen wrench
6. Phillips head screwdriver
7. 1/2" concrete drill bit
8. 1/4" drill bit
9. Power drill
10. PVC pipe primer & glue
11. Anti-seize
12. Saw to cut PVC pipe
13. Knife
14. Level

Gasket Installation:

- Gasket material has been applied at the factory for use at the connections/joints of the slide sections. Additional gasket material has been supplied in case any gasket has fallen off during shipping.
- Apply gasket in the required locations as shown in the figures below.
- Place gasket along the section to determine the length needed.
- Cut gasket to appropriate length.
- Remove backing and adhere gasket to slide.



Assembly:

Before getting started:

- **To prevent damage to the parts during assembly, it is recommended that cardboard or some other protective barrier is laid down on the ground where the slide is to be assembled.**
- **Verify that the gasket material is affixed to the slide parts as shown in Figures 2 and 3.**
- **During assembly, be sure to apply a thin coat of anti-seize compound to the threads of all fasteners. Anti-seize helps aid in assembly, prevents galling, and improves corrosion resistance.**

- 1) Assemble the pedestal part to the runway exit section as shown in Figure 4. Attach the pedestal part to the runway exit section by inserting the two lag screws into the holes located in the bottom of the pedestal.
- 2) Before inserting the lag bolts into the side of the runway exit part, 1/4" pilot holes must be drilled into the center of each of the recesses. The pilot holes should be drilled through both the runway exit section and into the pedestal.

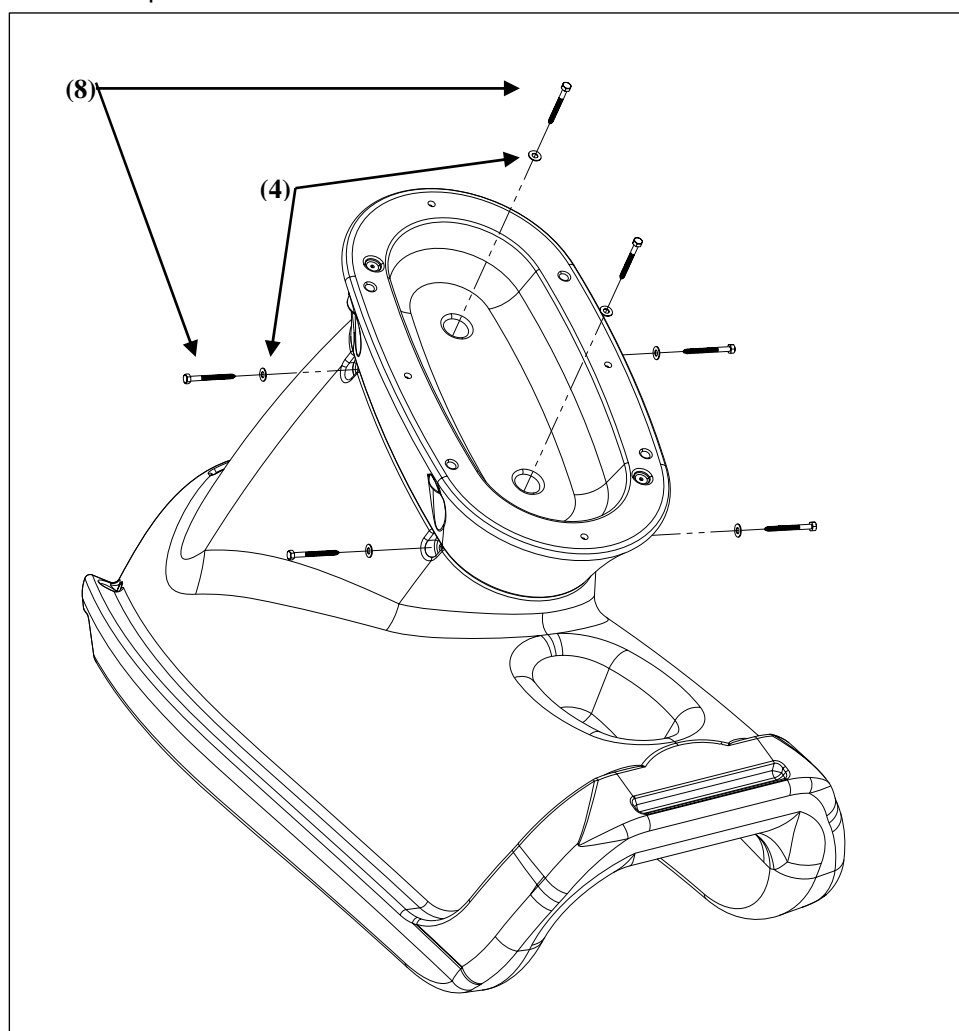


FIG. 4

- 3) Place the assembled runway exit section and pedestal upright so that the pedestal is resting on the ground. **Notes: It may take more than one person to perform this step. Verify that the gasket material is properly attached before assembling the parts.**
- 4) Insert the threaded studs into each of the threaded inserts as shown in Figure 5. The studs should be screwed in by hand until they reach the bottom of the insert. If the studs cannot be threaded in by hand, pliers may be used. Before using pliers, a piece of cloth should be placed over the stud to protect the threads from damage. **Note: Be sure to apply anti-seize to all fasteners to prevent galling.**

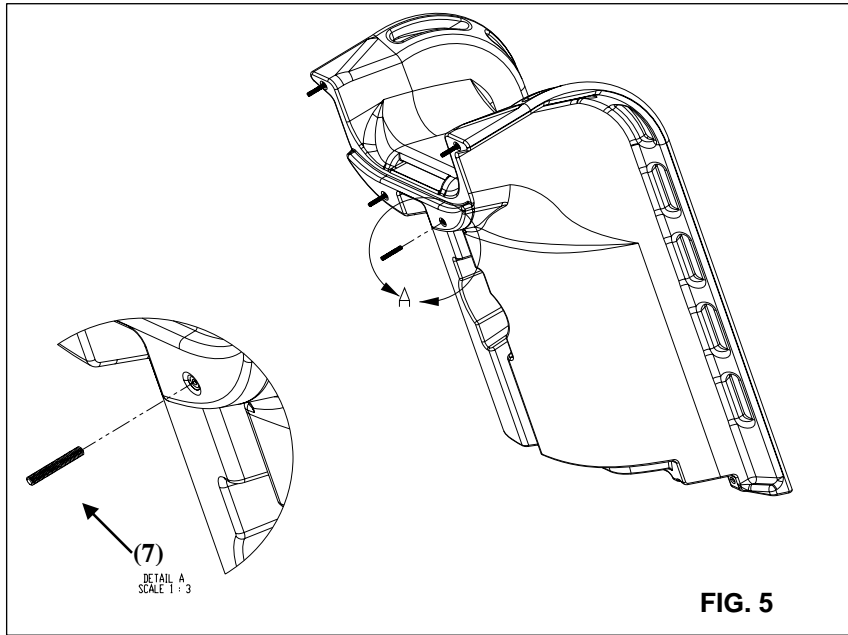


FIG. 5

5) Assemble the top ladder section to the lower ladder section as shown in Figure 6. Insert the two button head cap screws into the threaded inserts as shown in Figure 6. **Do not fully tighten the screws at this point; just get the screws started into the threaded inserts. Note: Be sure to apply anti-seize to all fasteners to prevent galling.**

6) Insert the button head cap screws into the back side of the ladder as shown in Figure 7. Tighten the screws until snug. Go back and fully tighten the screws from Step 7. **Note: Be sure to apply anti-seize to all fasteners to prevent galling.**

7) Insert the two carriage bolts into the steps as shown in Figure 6. Tighten the nuts onto the carriage bolt until the lock washer is fully compressed. **Note: Be sure to apply anti-seize to all fasteners to prevent galling.**

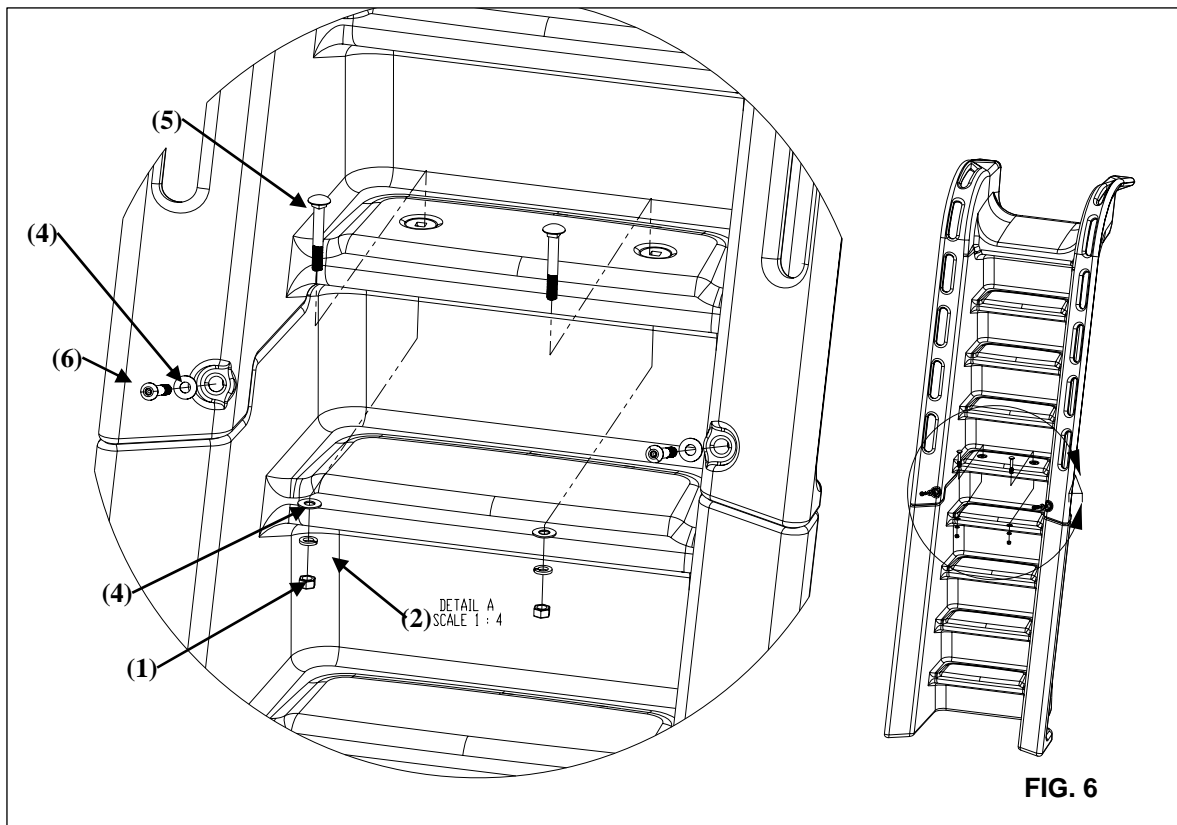
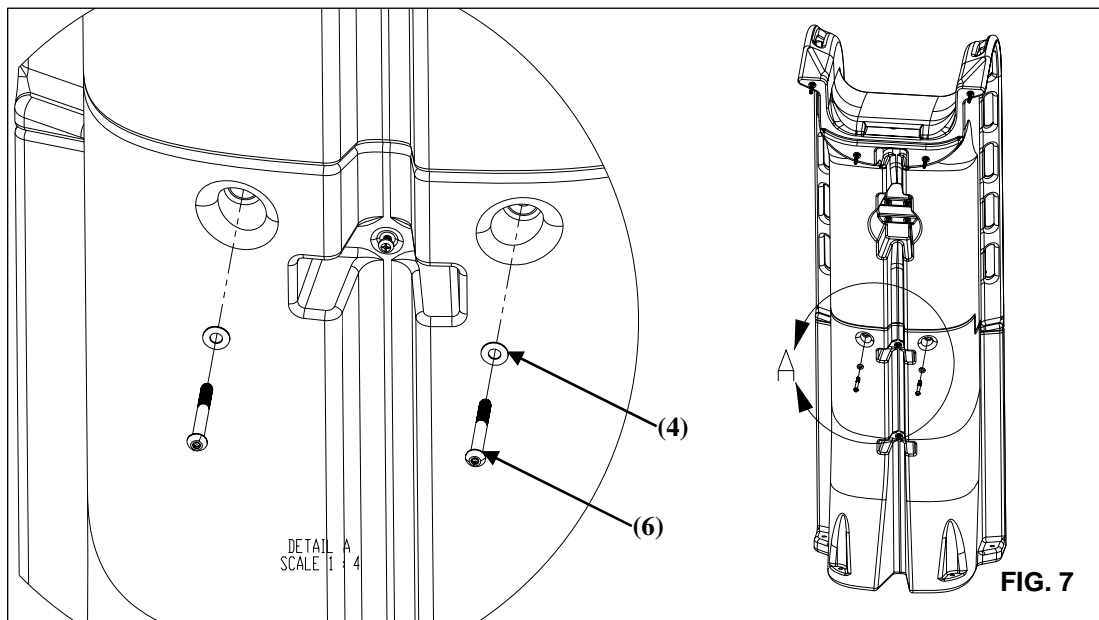
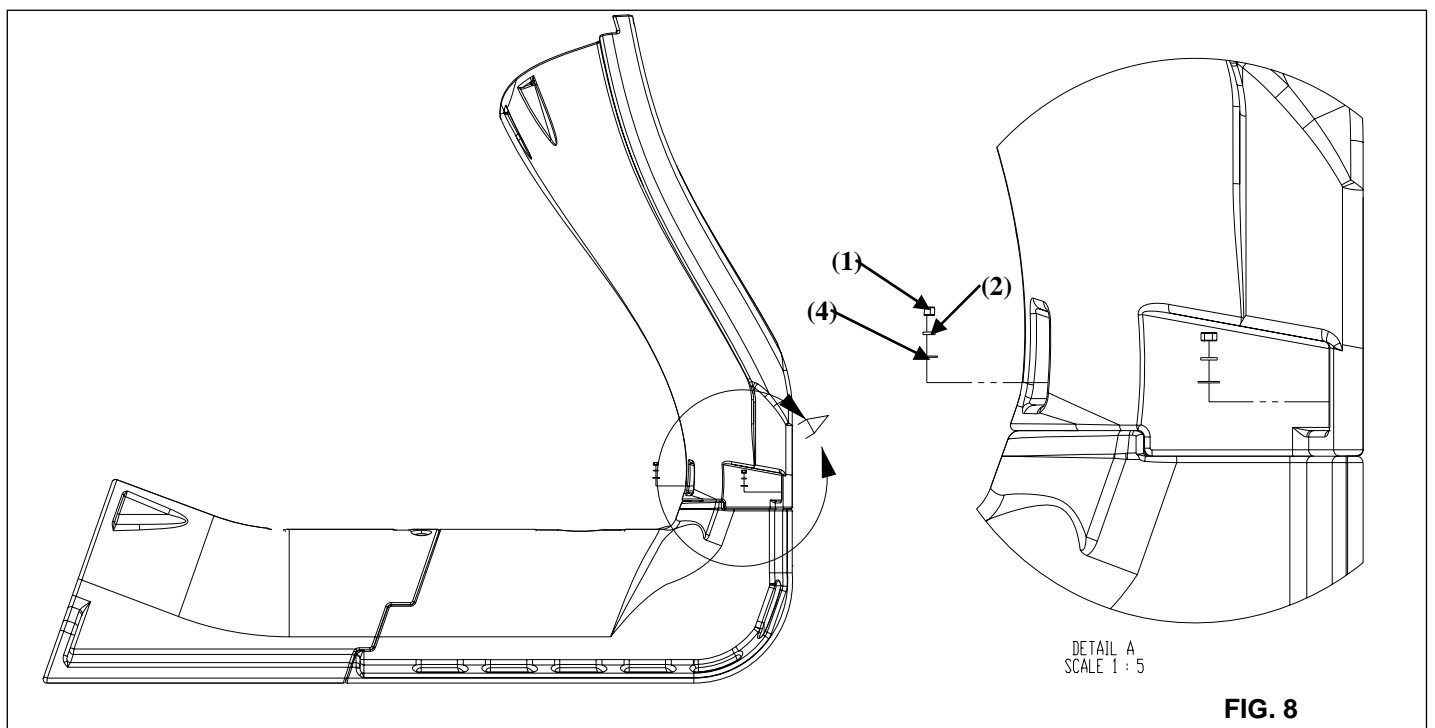


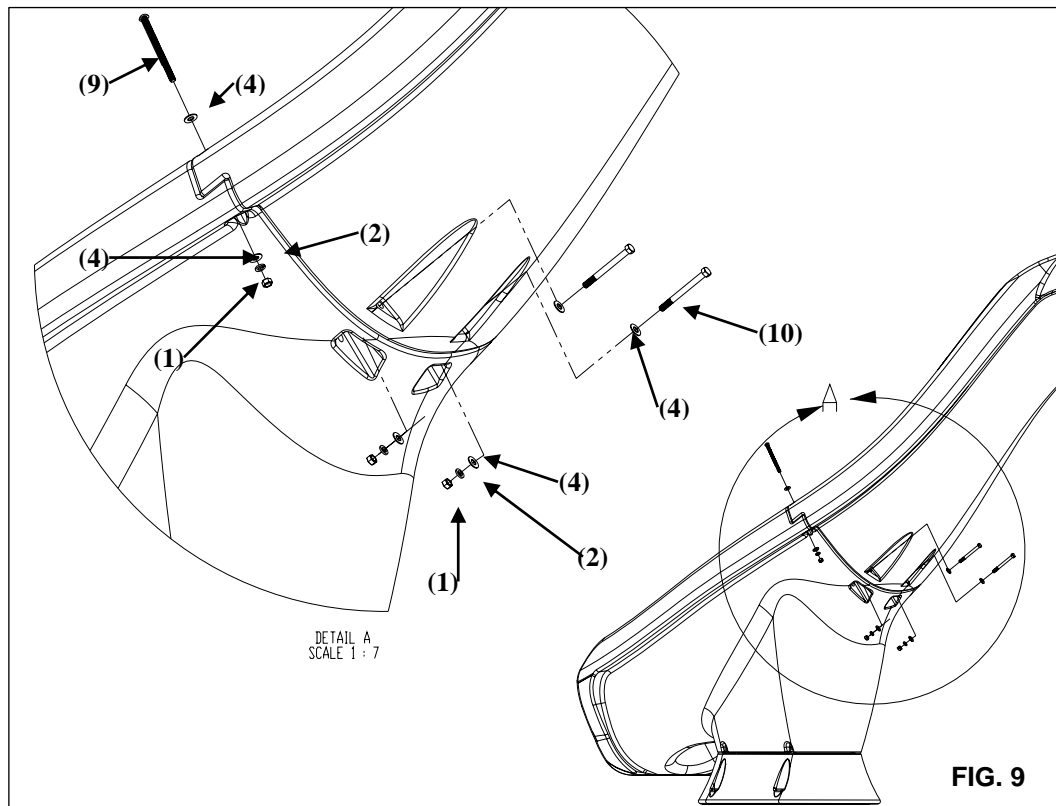
FIG. 6



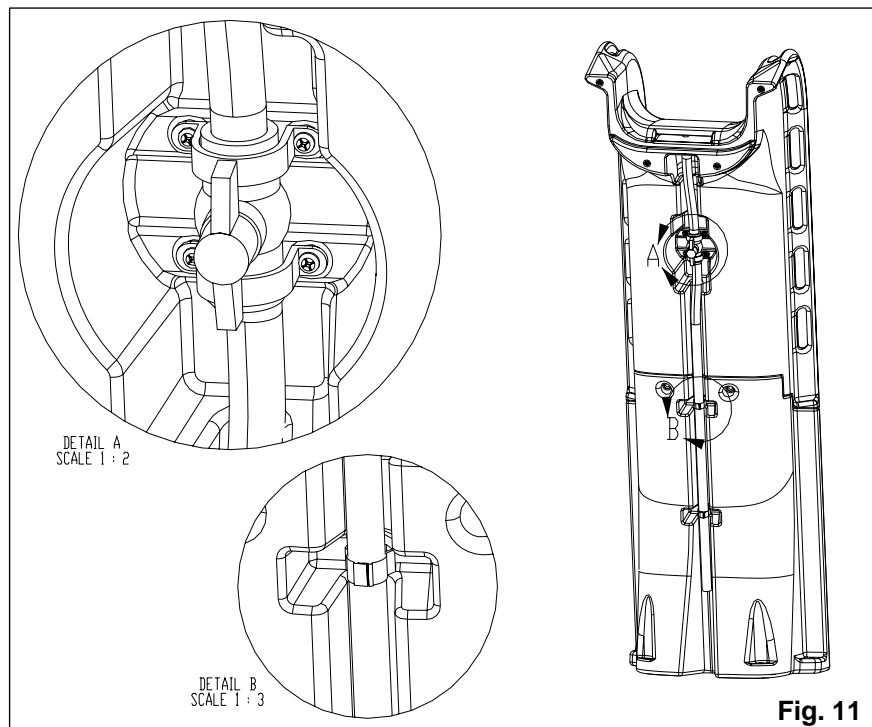
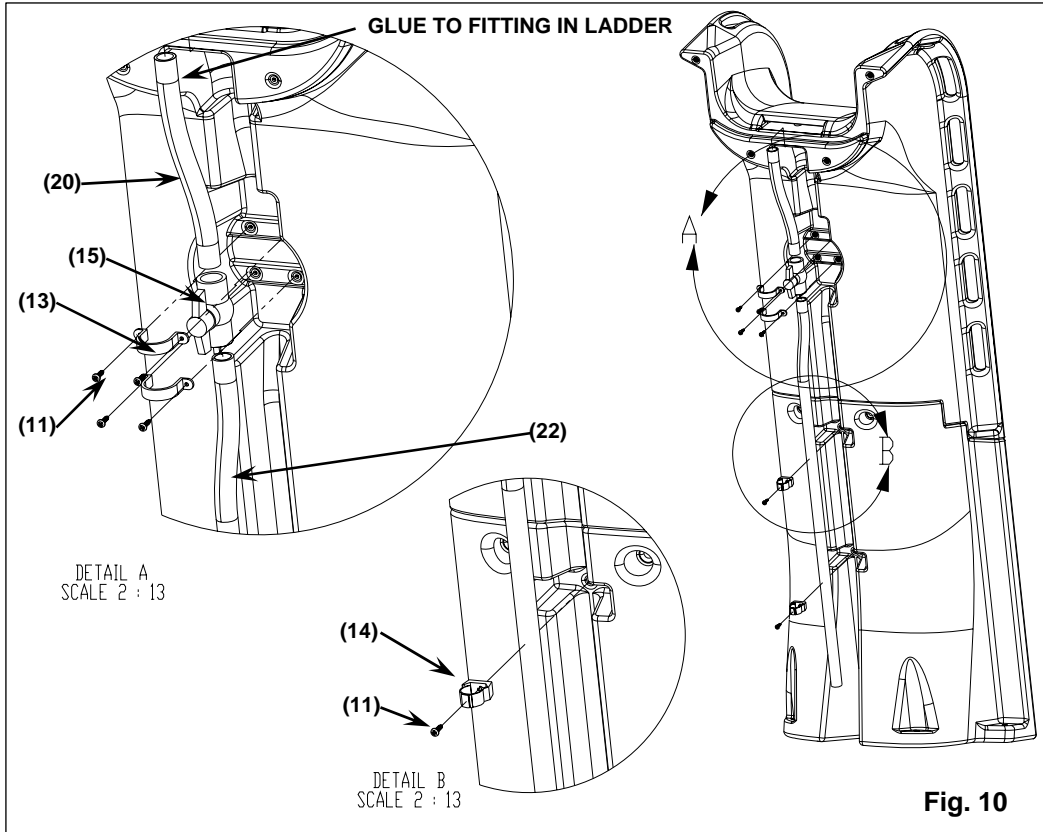
- 8) Align the threaded studs sticking out of the top ladder section with the holes in the upper runway section. Attach the runway to the ladder using the hardware shown in Figure 8. Tighten until the lock washer is fully compressed. **Notes: It may take more than one person to perform this step. Verify that the gasket material is properly attached before assembling the parts. Be sure to apply anti-seize to all fasteners to prevent galling.**



- 9) Stand the ladder upright and attach the runway entrance section to the runway exit section using the button head cap screws as shown in Figure 9. Tighten the button head cap screws until the lock washers are compressed. **Notes: It may take more than one person to perform this step. Be sure to apply anti-seize to all fasteners to prevent galling.**
- 10) Once the button head screws are tightened, insert the hex head cap screws into the underside of the runway as shown in Figure 9. Tighten the hex head cap screws until the lock washers are compressed. **Note: Be sure to apply anti-seize to all fasteners to prevent galling.**



- 11) First, fully assemble the water system components in the order shown in Figure 10 without gluing anything together. Assemble the water system parts to the ladder to ensure that everything fits before proceeding. Be sure that the ball valve is properly centered in the recess of the ladder.
- 12) Attach the pipe clamps to the ladder as shown in Figure 10, detail B.
- 13) Use PVC primer and glue to permanently assemble the parts together as in step 11.
- 14) Glue the top end of the PVC hose into the fitting in the ladder.
- 15) Use the pipe straps to fasten the ball valve into the ladder recess as shown in Figure 11, detail A.
- 16) Insert the hose into the hose clamps by firmly pushing the hose into the back of the clamp.



PLUMBING INSTRUCTIONS

1. The Typhoon is designed for a water supply line of 1" pipe. Plumb from pool return line with a 1" PVC pipe "stubbed up" at the deck positioned at the base of the ladder. Refer to **FIG. 1** on page 2. **FIG. 1** is for reference only. Assembled slide should be placed in its correct location and the "stub up" location marked and installed before mounting the slide to the deck. "Stub up" should be dark grey PVC to match the plumbing assembly of the slide. **Note: "Stub up" should extend above the deck 18" in height. It can be cut to proper length further in the installation process.**
2. If a garden hose is to be used, a garden hose adapter fitting is included with the slide. Assemble the pieces as shown in Figure 12 and attach to the end of the PVC plumbing assembly at the base of the ladder.
3. Proceed to the following section for **ON-DECK MOUNTING**. After the slide has been mounted to the deck, attach the "stub up" as necessary to the plumbing assembly installed in the ladder.
4. The Typhoon can handle up to 20 gallons per minute. Water flow is to be regulated using the ball valve near the base of the ladder.

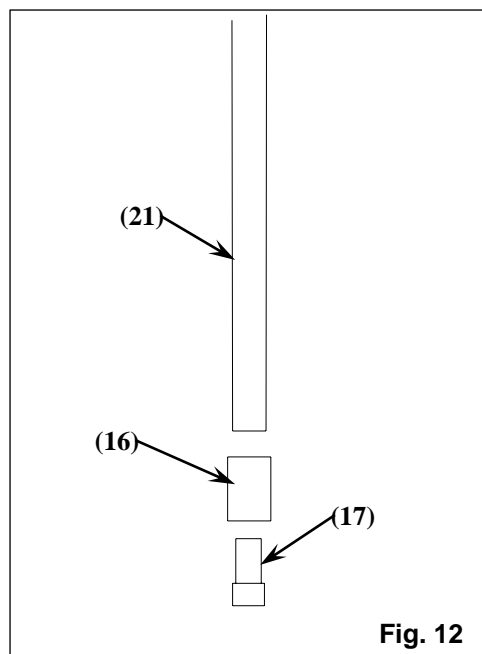
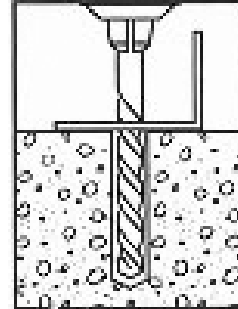


Fig. 12

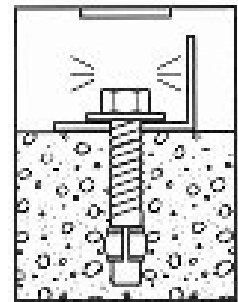
ON-DECK MOUNTING INSTRUCTIONS

1. Place the assembled slide on the deck relative to the pool wall. Ensure that the exit flume clears any coping. Slide may be angled slightly providing all dimensions are maintained as noted in the **Manufacturer's Placement Instructions** noted in the following section.
2. With the slide in its proper location, center punch or otherwise mark through the (8) mounting holes at the bottom of the ladder and pedestal so that a visible mark is apparent on the concrete.
3. Move the assembled slide aside to facilitate drilling of the anchoring holes.

4. Using a power drill and a 1/2" concrete drill bit, drill the holes to a depth of 4". Use tape or a marking on the drill bit to ensure that the hole for the anchor is drilled to the required depth. Maintain drill hole straight and perpendicular for proper holding strength of anchor stud.

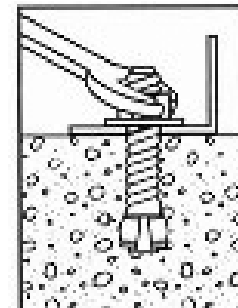


5. Clear the holes of all debris. Assemble anchor with nut and washer so that the top of the nut is flush with the top of the anchor. Move the slide over the holes and insert the anchors. Drive anchor through the slide mounting holes so that nut and washer are flush with the surface material.



6. Ensure the slide ladder is plumb by placing a level on a ladder tread. If necessary, shims can be provided by S.R. Smith to place beneath the base of the ladder to ensure it is plumb due to varying deck slopes. Please call 1. 800.824.4387 if shims are needed.

7. Expand anchor by tightening nut 3 to 5 turns. Once anchor is set remove nut and install a lock washer, item # (3), and retighten nut to a torque of 25 ft.-lbs.



MANUFACTURER'S PLACEMENT INSTRUCTIONS

1. The critical dimensions for placement of the TYPHOON are as shown in **FIG.'S 13** and **14**.
 - A. The slide exit runway surface shall not exceed twenty inches (20") above the water surface as shown in **FIG. 13**.
 - B. The slide shall be positioned so that all water flowing off the runway exit drops into the pool. The recommended overhang is 4 inches.
 - C. The minimum depth of water below the exit lip of the slide shall be three feet (3') and increase to four feet six inches (4'-6") at Pt. A, which is a distance of four feet six inches (4'-6") from the exit lip of the slide as shown in **FIG. 13**.
 - D. A minimum depth of four feet six inches (4'-6") shall be maintained at a distance of nine feet (9') along the extended centerline of the slide from Pt. A. as shown in **FIG. 13**.

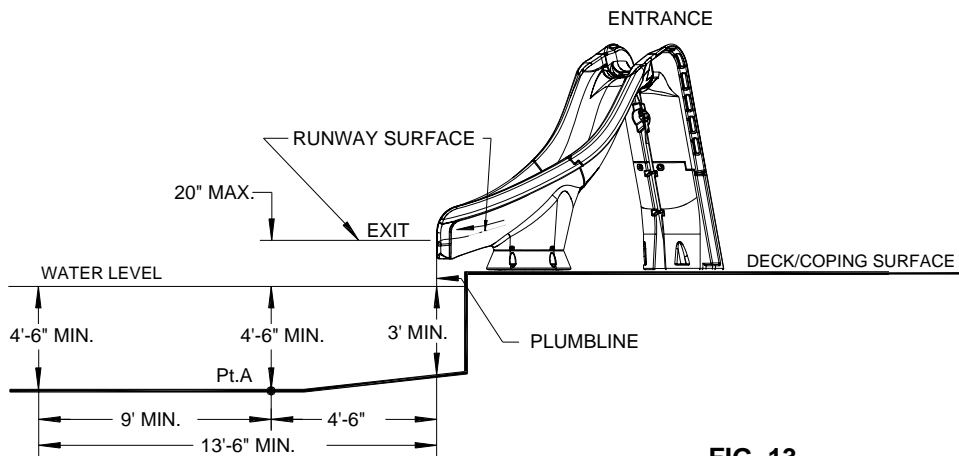


FIG. 13

2. A minimum clearance area in front of the slide shall be maintained at all times as follows:
 - A. The minimum clearance distance on either side of the extended centerline of the slide runway shall not be less than three feet six inches (3'-6") at a point no less than two feet six inches (2'-6") from the exit lip of the slide and extending a distance of thirteen feet six inches (13'-6") in front of the slide as shown in **FIG. 14**.
 - B. The minimum clearance area in front of a properly installed diving board on an inground swimming pool is a minimum distance of three feet six inches (3'-6") on either side of the board's centerline as shown in **FIG. 15**. Pt. C extends a minimum distance of "C" from the tip end of the board as shown in **FIG. 15**. The width distance "W" on either side of Pt. C is given in CHART 1 and shown in **FIG. 15**.

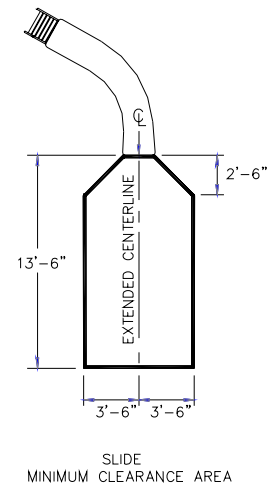


FIG. 14

CHART 1

BOARD MINIMUM CLEARANCE AREA		
POOL TYPE	"C" DIMENSION	"W" DIMENSION
I	14'-6"	5'-0"
II	14'-6"	6'-0"
III	16'-6"	6'-0"
IV	18'-6"	7'-6"
V	21'-0"	7'-6"

See Article 5 contained in ANSI/NSPI-5 2003 STANDARD FOR RESIDENTIAL INGROUND SWIMMING POOLS and refer to FIGURE 3 and Table 1 for Minimum Water Envelope Dimensions AB, BC and Width at Point C.

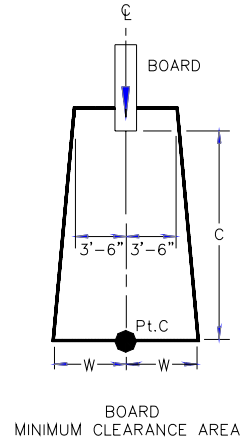


FIG. 15

"C" DIMENSION FOR BOARD = AB + BC

"W" DIMENSION FOR BOARD = WIDTH AT PT.C

- C. The minimum clearance area of a slide or diving board shall not intersect any coping or rope and float line as shown in **FIG. 16**. The minimum clearance area of a slide or diving board may intersect each other provided that they are not used simultaneously.

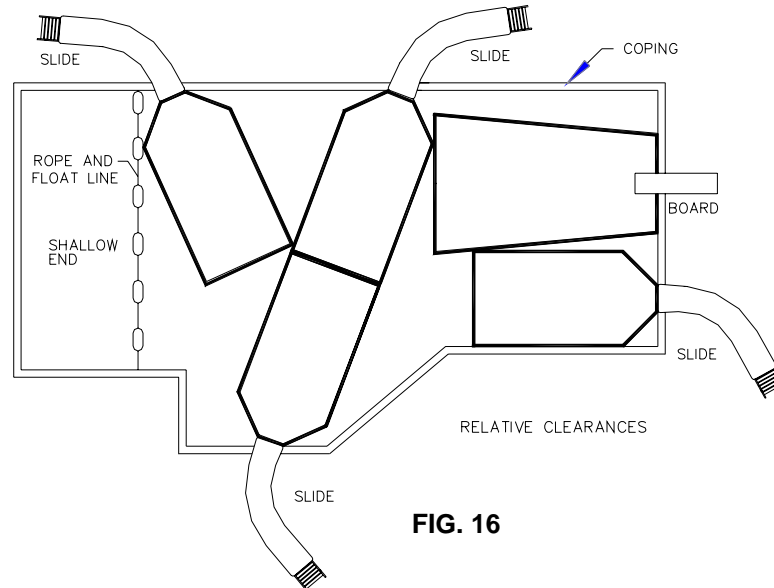


FIG. 16

INSTALLED TYPHOON STRUCTURAL & INSTALLATION CHECKLIST

1. Inspect the runway for visible cracks or tears.
2. Inspect the slide for sharp edges, protrusions, cracks or tears.
3. Inspect all fasteners to make sure they are fully tightened.
4. Inspect the ladder for rigidity and attachment.
5. Measure the following dimensions and compare with the Manufacturer's Placement Instructions on pages 12 and 13.
 - Measure the depth of water in front of the slide exit. (4'-6" min. depth at a distance of 4'-6" from exit end of slide.)
 - Measure the height of the slide runway exit above the water. (20" max.)
 - Measure the distance between the slide centerline and the edge of other pool equipment.
6. Observe the position of the exit of the slide as shown in **FIG.'S 13, 14** and **16** on pages 12 and 13.

IMPORTANT

**PERSONALLY GIVE TO SLIDE OWNER THE TYPHOON OWNER'S MANUAL,
THE WARRANTY CARD AND ANSWER ALL QUESTIONS.**