

AMERICA'S BEST VALUE IN SWING SETS.™

# 6.4 Deluxe Spiral Slide Install Manual

Version 4.14



### **Tools Needed for Assembly**

Tape Measure 24" Level

Phillips Screw Driver 3/8" Cordless Drill or Electric Drill

Claw Hammeror Rubber Mallet Pliers or Vise Grips 9/16" Deep Well Socket 3/4" Deep Well Socket

Phillips Head Screw Bits An Adult with two Adult Helpers

Angle Square

3/8" Drive Ratchet or Electric Impact Gun

7/16" Deep Well Socket

1/8", 1/4", and 9/16" Drill Bits

Please familiarize yourself with the install manual, parts/components and general construction process of your new swing set before getting started. Approximate assembly time: 6 to 8 hours. 6 foot unobstructed safety perimeter around swing set recommended.

# Choosing A Location For Your Playset

When choosing a location for your swing set, always keep your child or children's safety in mind. Here are some recommendations to help you locate and install a safe play area.

- This play set is designed for the use of 4 occupants who have a combined weight not exceeding 800 pounds on the elevated floor; 3 occupants who have a combined weight of 525 pounds on the swing area; for a total Unit capacity of 5 occupants who have a combined weight of 1325. (this weight is not including the picnic table area)
- On-site adult supervision is required.
- The swing set should be located on level ground. The stationary components such as ladders and slides are required to be a minimum of six feet from any structure or obstruction such as a fence, garage, house, tree, overhanging branches, electrical wires, clotheslines, etc. Any swinging equipment is also required to be a minimum distance twice the height of the swing beam away from these obstructions or structures as well. The swing set should be located a safe distance from any water hazards, such as a lake, river, bayou, swimming pool, etc.
- Do not install this residential swing set in a commercial setting. This swing set is not manufactured for commercial usage and will void all warranties. Tree Frogs Wooden Swing Set Factory is not responsible for any damages or injuries resulting from this swing set being used in a commercial setting.
- Never install this swing set indoors; or over concrete, asphalt, packed earth, grass, carpet or any other hard surface. A fall onto a hard surface can result in serious or fatal injury.
- The U.S. Consumer Product Safety Commission (CPSC) recommends that you install and maintain a resilient surface under your swing set. The CPSC's Consumer Information Sheet for Playground Surfacing Materials is on the next page. A resilient surface, should be installed after the swing set has been completely assembled according to these instructions. The swing set must rest on solid ground. Please note that this swing set has a maximum fall height of 7'.

### Maintaining Your Swing Set

Here are some maintenance tips required to insure safe play on your swing set for years of fun.

- At the beginning of each usage season and every two weeks during, check: nuts and bolts and tighten as needed, swing seats, chains, ladders, slides, rope and wood components for sign of deterioration and replace if necessary.
- On a yearly basis, we recommend that you coat your swing set with a sealant or preservative. You may also want to spot sand any areas prior to sealing.
- \*\* Special note: Although we recommend that you reseal your swing set annually, you may have to touch up the high traffic areas and/or areas that have a high exposure to direct sunlight.\*\*
- Be sure that the sealant you select is non-toxic and child safe. Your local Tree Frogs Wooden Swing Set Factory dealer may offer a complete power wash and reseal and maintenance program.
- Do not use line trimmers or "weed eaters" around your swing set. The line will remove both paint and wood from uprights and base pieces. Any damage resulting from this type of abuse is not covered under our limited warranty.
- Remove plastic swing seats and take in doors or do not use when temperature drops below 0°F.

#### Weight Limits for Tree Frogs Swing Sets

Fort Platform: 800 Lbs. Total Weight Swing Belts: 175 Lbs. Trapeze: 125 Lbs.

Full Bucket Swing: 50 Lbs. Toddler Bucket Swing: 50 Lbs. Tire Swing: 125 Lbs. Total Weight

Rope Ladder: 75 Lbs. Rock Wall: 150 Lbs. All Slides: 125 Lbs.

Tree Frogs recommends that the weight limits for all components must not be exceeded. Failure to adhere to these and other safety guidelines could result in damage to the swing set and/or injury to the users.

Please keep this install manual for future reference.

### To insure SAFE PLAY adults must teach children:

- Not to walk close to, in front of, behind, or between moving items.
- Not to swing empty swing seats.
- Not to swing sideways into the path of adjacent swings.
- Not to use the swing set in a manner other than that for which it is intended.
- Not to get off the equipment while it is in motion.
- Not to jump off the tower.
- Not to stand in the swing seats.
- Not to swing so high that chains become slack, or above the height of the swing support.
- Not to jump on a slide.
- Not to climb on top of the swing support.
- Not to attach to the swing set any item that is not specifically designed for use with the equipment, such as (but not limited to) jump ropes, clotheslines, pet leashes, cables, and chains. These may become strangulation hazards.
- To hold on to swings and climbers with both hands.
- To slide feet first, never head first.
- To watch for other children while swinging or playing near the swing set.

#### To also insure SAFE PLAY adults must:

- Limit climbing and swinging heights to each child's ability.
- Verify that suspended climbing ropes are secured at both ends.
- Verify that suspended climbing ropes cannot be looped back on themselves.
- Dress children appropriately for play. Use well-fitted shoes that do not have slippery soles.
- Avoid ponchos, scarves, hoods, loose fitting clothing, neckties, and any clothing with a drawstring. Serious injury could result should any part of the children's clothing become entangled in the swing set.
- Do not allow children to play wearing helmets.
- Remember that children are inventive. When they develop games that are unsafe, be alert and change the rules.

### **IMPORTANT - PLEASE READ**

As fresh lumber acclimates to its new environment, the natural tendencies of the tree can show itself in the form of checks, or "cracks" in the lumber. In almost all cases this is normal and it will not affect the structural integrity of your play set.

Cosmetic defects that do not affect the structural integrity of the product, or natural defects of wood such as warping, checking or any other physical properties of wood that do not present a safety hazard, are not covered by this warranty.

Defects that develop because the product is exposed to extreme climate conditions are not covered by this warranty.

Defects that develop as a result of faulty or improper installation of the product are also not covered by this warranty.

Most cracks are not warrantable, however if you believe that the integrity of your play set is compromised by this natural occurrence, please contact the Tree Frogs Swing Set Dealer that you purchased your swing set from.

We appreciate your purchase and know that you will enjoy your play system for many years to come.

#### **Pre-Assembly Hints**

- Depending on your experience, assembly of our play sets can take as little as 6 hours up to 24 hours, depending on size, after inventory of parts; therefore, we recommend you set aside a full two days for assembly.
- Identify all of the parts for your play set. Empty each box and lay out boards so you can see each part. Your instruction book will have detailed drawings that will make it easy for you to recognize individual parts. Keep all hardware and metal parts separate from wooden pieces.
- After everything is laid out, check carefully to ensure all parts are present. Make sure there are no broken boards.
- Find an area to sort your hardware. It is best to open the hardware on a solid surface so that you do not lose any pieces in the grass. This will save time and familiarize you with all the different pieces in the hardware bag.
- \*\*Important note: Wood has some natural defects such as knots, surface cracks, etc... We reject parts that are structurally defective. We use a high quality lumber in our structures; however, you should inspect each part for splinters or rough spots and sand them smooth to prevent injury.\*\*
- After familiarizing yourself with all of the components, read all instructions thoroughly. Reading instructions after you have studied the parts will help you understand more clearly the installation process, and help to eliminate unnecessary mistakes.
- Pay close attention to the diameter and length of each bolt and screw.
- Never tighten hardware completely at first. It helps to have some adjustment for bolt alignment while you are attaching parts together. After everything is square, tighten each joint.
- After the main unit is assembled it is critical that the floor is level and square. If the main frame is not level, the walls and floor will be out of square.
- After you complete installation, make sure every bolt, screw, and nut is tight, and every board is secure. Wood will expand and contract with the seasons.
- Place the set on level ground, not less than 6ft from any structure or obstruction such as a fence, garage, house, overhanging branches, laundry lines, or electrical wires.
- All 1/4" and 3/8" lag bolts must have pre-drilled holes 1-1/2" to 2" deep. Use a 1/8" drill bit for the 1/4" lag bolts and 1/4" drill bit for 3/8" lag bolts. Use pre-drilled holes in facias as a reference for placing lag bolt pilot holes.
- If a board lifts or rises causing a gap between boards when running in lag bolts or screws, back out the screw or lag bolt and press or apply pressure (but not enough to crack or break board) while re—running in the lag bolt or screw in the same hole.
- Do not over tighten bolts, lag bolts or screws. You can damage boards, break hardware, and/or strip out the hardware.
- When using hammer do not beat on the hardware, but gently tap it in. Never beat on the wood as it will leave marks.

### Leveling Your Swing Set During Assembly

- Complete the steps which will be the basic frame of the fort {i.e. four corner posts with base (sand box boards) and deck supports}
- Position in the most level area chosen for the play set, keeping in mind the location and size of the swing beam, ladder, slides, etc. that extend off the fort.
- Once the frame is in the final position, check for vertical and horizontal levelness to determine which side(s) will need to be dug into the ground to level the play set.
- With a shovel, score the ground around the outside edges of the sandbox boards on the 'high' side of the fort. This is the area that will be dug in. Make sure to score deep enough; the scored lines will be your digging template.
- Push the frame off and away from the scored area, far enough to dig and remove dirt to reach the appropriate depth.
- Dig a channel along the scored line(s) for the base of the fort (corner post and sandbox boards) to rest into. Dig the channel(s) to the same level depth. The bottom of the channel(s) should be level to each other so your frame doesn't teeter or rock because the channel(s) are uneven.
- Once you have removed enough grass and dirt, slide/push the frame into the channel(s). Place a level on the vertical and horizontal boards of the frame to determine if enough soil, or too much, was removed.
- Repeat this process until the basic frame is plumb and level and in its final position before completing the rest of the assembly.
- Measure to make sure fort is square.

\*\* Important: if you require a channel depth of more than 6", then we recommend you have your play set area professionally graded before completing assembly. \*\*

#### CONSUMER INFORMATION SHEET FOR PLAYGROUND SURFACING MATERIALS

The U.S. Consumer Product Safety Commission (CPSC) estimates that about 100,000 playground equipment related injuries resulting from falls to the ground surface are treated annually in U.S. hospital emergency rooms. Injuries involving this hazard pattern tend to be among the most serious of all playground injuries, and have the potential to be fatal, particularly when the injury is to the head. The surface under and around playground equipment can be a major factor in determining the injury-causing potential of a fall. It is self-evident that a fall onto a shockabsorbing surface is less likely to cause a serious injury than a fall onto a hard surface. However, it should be recognized that some injuries from falls will occur no matter what playground surfacing material is used.

Playground equipment should never be placed on hard surfaces such as concrete or asphalt. Grass may appear to be acceptable, but can turn to hard packed earth in areas of high traffic. Shredded bark mulch, wood chips, or fine gravel are considered to be acceptable shock absorbing surfaces when installed and maintained at a sufficient depth under and around play equipment.

TABLE 1 -CRITICAL	HEIGHTS (in	n feet) Ol	F TESTED	<b>MATERIAL</b>

MATERIAL	UNCOMPRESSED DEPTH		D DEPTH	COMPRESSED DEPTH	
	6 Inch	9 Inch	12 Inch	9 inch	
Wood Chips	7	10	11	10	
Double Shredded Bark Mulch	6	10	11	7	
Engineered Wood Fibers	6	7	>12	6	
Fine Sand	5	5	9	5	
Coarse Sand	5	5	6	4	
Fine Gravel	6	7	10	6	
Medium Gravel	5	5	6	5	
Shredded Tires**	10-12	N/A	N/A	N/A	

\*\* This is data from tests conducted by independent testing laboratories on a 6 inch depth of uncompressed shredded tire samples produced by four manufacturers. The test reported critical heights, which varied from 10 feet to greater than 12 feet. It is recommended that persons seeking to install shredded tires as a protective surface request test data from the supplier showing the critical height of the material when it was tested in accordance with ASTM F1292.

Table 1 should be read as follows: If, for example, uncompressed wood chips are used at a minimum of 6 inches, the Critical Height is 7 feet. If 9 inches of uncompressed wood chips are used, the Critical Height is 10 feet. It should be noted that, for some materials, the Critical Height decreases when the material is compressed. It is recommended that a shock absorbing material should extend a minimum of 6 feet in all directions from the perimeter of stationary equipment such as climbers and slides. However, because children may deliberately jump from a moving swing, the shock absorbing material should extend in the front and rear of a swing a minimum distance of 2 times the height of the pivot point measured from a point directly beneath the pivot on the supporting structure.

This information is intended to assist in comparing the relative shock-absorbing properties of various materials. No

This information is intended to assist in comparing the relative shock-absorbing properties of various materials. No particular material is recommended over another. However, each material is only effective when properly maintained. Materials should be checked periodically and replenished to maintain correct depth as determined necessary for your equipment. The choice of a material depends on the type and height of the playground equipment, the availability in your area, and its cost.

This information has been extracted from the CPSC publications "Playground Surfacing-Technical Information Guide" and "Handbook for Public Playground Safety." Copies of these reports can be obtained by sending a postcard to:

Office of Public Affairs
U.S. Consumer Product Safety Commission
Washington, D.C. 20207

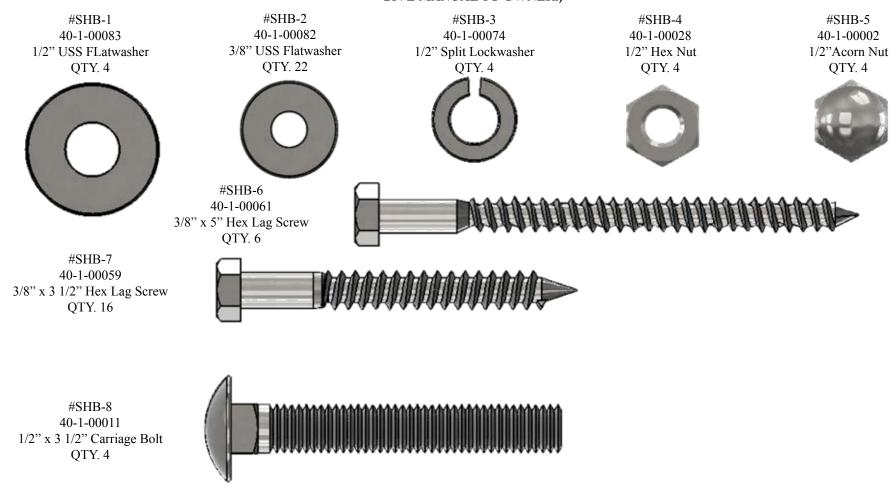
Toll-free Hotline: 1-800-638-2772 or at http://www.cpsc.gov

Loft Spiral Slide Filler Bundle								
Item No.	Part Number	Part Description	QTY.					
SFB-1	10-4-00197	SPIRAL SLIDE FILLER BOARD	2					
Dlx Spiral Slide Legs Bundle								
SLB-1	17-4-00127	20" SPIRAL SLIDE BRACE	2					
SLB-2	17-4-00128	30" SPIRAL SLIDE BRACE	2					
SLB-3	17-4-00129	LEFT 24" SPIRAL SLIDE LEG	1					
SLB-4	17-4-00130	RIGHT 24" SPIRAL SLIDE LEG	1					
SLB-5	17-4-00131	RIGHT 32" SPIRAL SLIDE LEG	1					
SLB-6	17-4-00132	LEFT 32" SPIRAL SLIDE LEG	1					
Dlx Spiral Slide Hardware Bag								
SHB-1	40-1-00083	1/2" USS FLATWASHER	4					
SHB-2	40-1-00082	3/8" USS FLATWASHER	22					
SHB-3	40-1-00074	1/2" SPLIT LOCKWASHER	4					
SHB-4	40-1-00028	1/2" HEX NUT	4					
SHB-5	40-1-00002	1/2" ACORN NUT	4					
SHB-6	40-1-00061	3/8" X 5" HEX LAG SCREW	6					
SHB-7	40-1-00059	3/8" X 3 1/2" HEX LAG SCREW	16					
SHB-8	40-1-00011	1/2" X 3 1/2" CARRIAGE BOLT	4					
	Dlx Spiral Slide Hardware Kit							
SHK-1	40-1-00082	3/8" USS FLATWASHER	12					
SHK-2		5/16" FLATWASHER	120					
SHK-3	40-1-00003	3/8" X 1 1/4" CARRIAGE BOLT	12					
SHK-4	40-1-00105	5/16" X 1" HEX BOLT	60					
SHK-5	40-1-00064	3/8" NYLON LOCKNUT	12					
SHK-6		5/16" NYLON LOCKNUT	60					
Dlx Spiral Slide Hardware Kit								
SC-1		SLIDE COMPONENT-1	1					
SC-2		SLIDE COMPONENT-2	1					
SC-3		SLIDE COMPONENT-3	1					
SC-4		SLIDE COMPONENT-4	1					
SC-5		SLIDE COMPONENT-5	1					
SC-6		SLIDE COMPONENT-6 EXIT	1					
SC-7		SLIDE COMPONENT-7 ENTRANCE	1					



# DLX. SPIRAL SLIDE HDWR. BAG

INSTALLER NOTE: (YOU MUST ASSEMBLE THIS PRODUCT IN ACCORDANCE WITH THESE ASSEMBLY INSTRUCTIONS. WHEN COMPLETE GIVE MANUAL TO OWNER.)



### MEASUREMENT TAKEN FROM BOTTOM OF BOLT HEAD TO THE BOTTOM OF BOLT



USE THE RULER TO MEASURE YOUR BOLTS AND SCREWS. HARDWARE VIEWS SHOWN ABOVE ARE 1:1 SCALE AND CAN BE USED TO MATCH HARDWARE SIZES.

#### DLX. SPIRAL SLIDE HDWR. KIT

INSTALLER NOTE: (YOU MUST ASSEMBLE THIS PRODUCT IN ACCORDANCE WITH THESE ASSEMBLY INSTRUCTIONS. WHEN COMPLETE GIVE MANUAL TO OWNER.)

#SHK-1 40-1-00082 3/8" USS Flatwasher QTY. 12



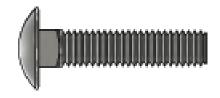
#SHK-4 40-1-00105 5/16" x 1" Hex Bolt QTY. 60

#SHK-2

5/16" USS Flatwasher QTY. 120



#SHK-3 40-1-00003 3/8" x 1 1/4" Carriage Bolt QTY. 12



#SHK-5 40-1-00064 3/8" Nylon Insert Locknut QTY. 12



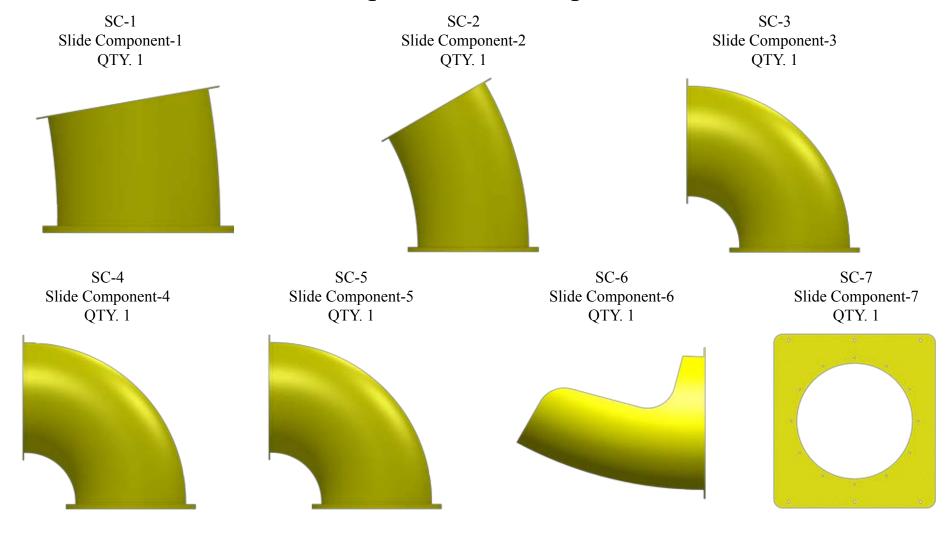
#SHK-6

5/16" Nylon Insert Locknut QTY. 60



MEASUREMENT TAKEN FROM BOTTOM OF BOLT HEAD TO THE BOTTOM OF BOLT

# **DLX Spiral Slide Components**

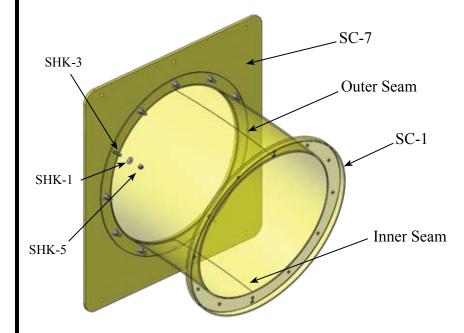


# **Sub-Assemblies**

#### **Parts Needed**

SC-1- Slide Component-1-SLB-1-20" Spiral Slide Brace-SLB-3- 24" (L) Spiral Slide Leg-SLB-5- (R) 32" Spiral Slide Leg- (1)

- (1) SC-7- Slide Panel-
- SLB-2-30" Spiral Slide Brace-(2)
- (1) SLB-4- (R) 24" Spiral Slide Leg-
- SLB-60 (L) Spiral Slide Leg-



STEP: The first thing we need to do is find the inner and outer seam of the slide part. The inner seam will be on the inside of the curve and the outer seam will be on the outside of the curve. Then we are going to line the bottom seam up with the hole in the bottom center of the panel and the top seam to the top center hole of the panel. Then using the SHK-3 (3/8" x 1 1/4" Carriage Bolts), the SHK-1 (3/8" USS Flatwashers), and the SHK-5 (3/8" Nylon Locknuts) we lag down Slide Component-1 to the Slide Panel. Then our 1st sub assembly will be done and we can set it to the side for now.

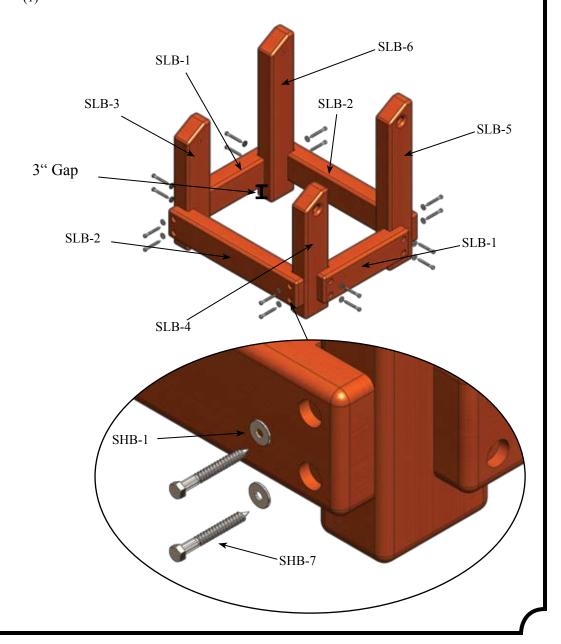
#### Hardware Needed

SHK-3- 3/8" x 1 1/4" Carriage Bolt-(12)SHB-2-3/8" USS Flatwasher-(16)

SHK-5- 3/8" Nylon Locknut-(12)SHK-1-3/8" USS FLatwasher-(12) (2) (16)

SHB-7- 3/8" x 3 1/2" Hex Lag Bolt-

(1) (1)



#### **Parts Needed**

SFB-1- Spiral Slide Filler Board- (2)

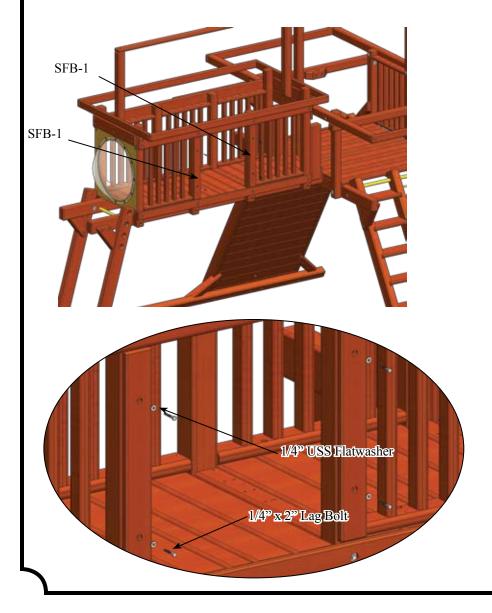
Step 1 Assembly-

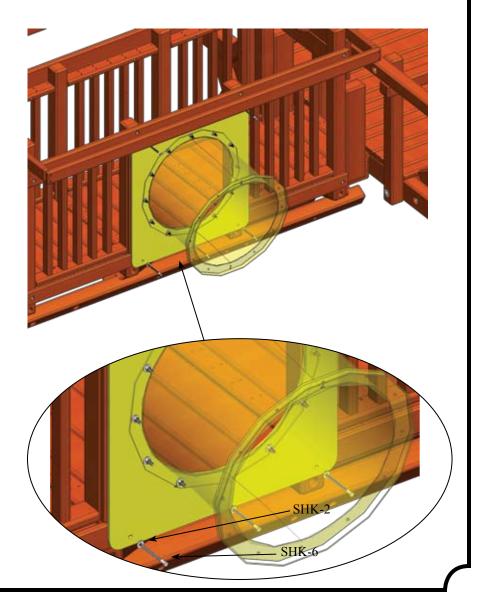
#### **Hardware Needed**

1/4" x 2" Hex Lag Bolts- (4) w/ Loft Hardware Bundle 1/4" USS Flatwashers- (4) w/ Loft Hardware Bundle

SHK-6- 3/8" x 5" Hex Lag Screw- (6)

SHK-2- 3/8" USS Flatwasher- (6)

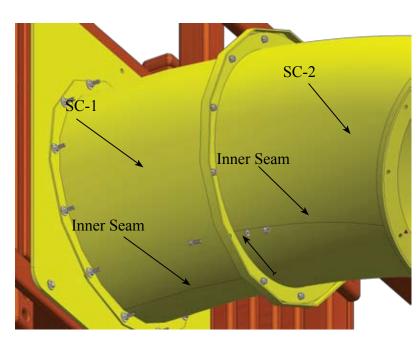




#### **Parts Needed**

SC-2- Slide Component 2- (1)

SC-3- Slide Component 3- (1)



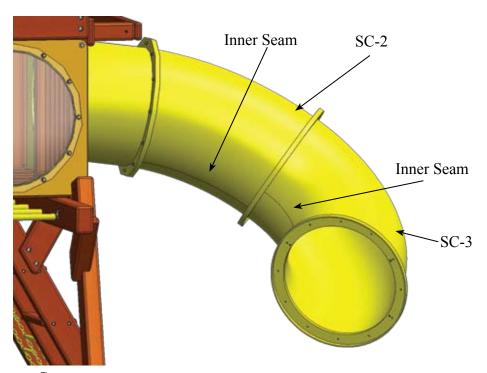
Step: Again the first thing we want to do now is find the inner and outer seam of SC-2. The inner seam being on the inside of the curve and the outer seam being on the outside of the curve. When attaching this part to SC-1 we are going to take the inner seams and line them up, then rotate the SC-2 CLOCKWISE one hole as shown above. Then using (2) SHK-2's (5/16" Flatwashers), (1) SHK-4 (5/16" x 1" Hex Bolt), and (1) SHK-6 (5/16" Nylon Locknut) for each hole we are going to lag down the part.

Depending on which way the unit is facing the step may be neversed

#### **Hardware Needed**

SHK-2- 5/16" USS Flatwasher- (48) SHK-4- 5/16" x 1" Hex Bolt- (24)

SHK-6- 5/16" Nylon Locknut- (24)



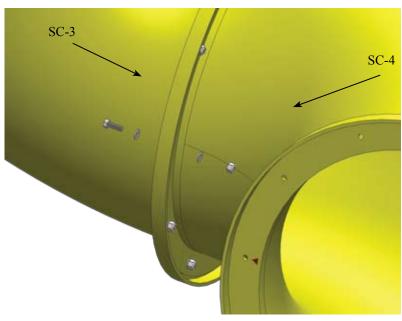
Step: The first thing we want to do now is find the inner and outer seam of SC-3. The inner seam being on the inside of the curve and the outer seam being on the outside of the curve. When attaching this part to SC-2 we are going to take the inner seams and line them up, then rotate the SC-3 CLOCKWISE one hole as shown above. Then using (2) SHK-2's (5/16" Flatwashers), (1) SHK-4 (5/16" x 1" Hex Bolt), and (1) SHK-6 (5/16" Nylon Locknut) for each hole we are going to lag down the part.

 $^{\mbox{\tiny $2$}}$  Depending on which way the unit is facing the step may be reversed  $^{\mbox{\tiny $2$}}$ 

#### **Parts Needed**

SC-4- Slide Component- 4- (1)

SC-5- Slide Component-5- (1)



Step: Again the first thing we want to do now is find the inner and outer seam of SC-4. The inner seam being on the inside of the curve and the outer seam being on the outside of the curve. When attaching this part to SC-3 we are going to take the inner seams and line them up, then rotate SC-4 COUNTER CLOCKWISE two holes. Then using (2) SHK-2's (5/16" Flatwashers), (1) SHK-4 (5/16" x 1" Hex Bolt), and (1) SHK-6 (5/16" Nylon Locknut) for each hole we are going to lag down the part.

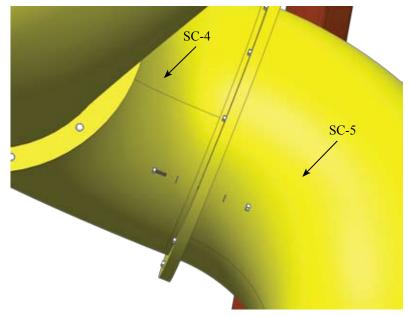
 $^{\Leftrightarrow \Rightarrow}$  Depending on which way the unit is facing the step may be reversed  $^{\Leftrightarrow \Rightarrow}$ 

#### **Hardware Needed**

SHK-2- 5/16" USS Flatwasher- (48)

SHK-4- 5/16" x 1" Hex Bolt- (24)

SHK-6- 5/16" Nylon Locknut- (24)

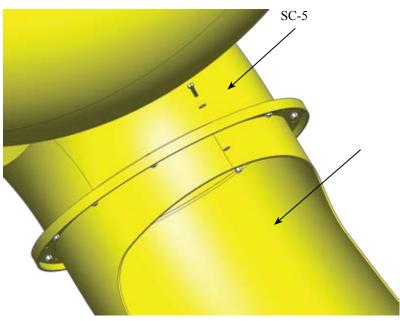


Step: Again the first thing we want to do now is find the inner and outer seam of SC-5. The inner seam being on the inside of the curve and the outer seam being on the outside of the curve. When attaching this part to SC-4 we are going to take the inner seams and line them up, then rotate SC-5 COUNTER CLOCKWISE ONE and ONE HALF holes. You won't have lined up holes. So we need to make some. Having someone hold the part, use a marker and dot the new holes. Using a 3/8" drill, drill out the marks. Then using (2) SHK-2's (5/16" Flatwashers), (1) SHK-4 (5/16" x 1" Hex Bolt), and (1) SHK-6 (5/16" Nylon Locknut) for each hole we are going to lag down the part.

\*\* Depending on which way the unit is facing the step may be reversed\*\*

#### **Parts Needed**

SC-6- Slide Component 2- (1)



Step: For the SC-6 we want it to be level. Making the exit an exit. To do this we can line up the seams straight up and down like in the very first assembly or we can line up the inner seams of SC-5 and SC-6, then rotate COUNTER CLOCKWISE 2 holes. Then using (2) SHK-2's (5/16" Flatwashers), (1) SHK-4 (5/16" x 1" Hex Bolt), and (1) SHK-6 (5/16" Nylon Locknut) for each hole we are going to lag down the part.

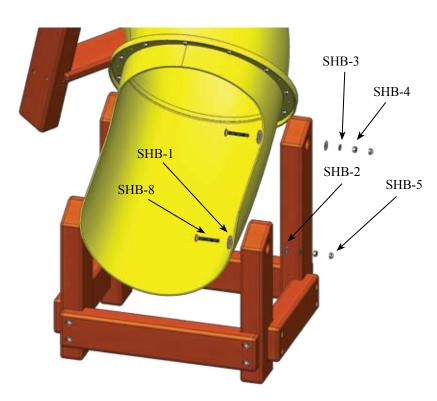
#### **Hardware Needed**

SHK-2- 5/16" USS Flatwasher- (24) SHK-4- 5/16" x 1" Hex Bolt- (12)

SHK-6- 5/16" Nylon Locknut- (12)



Step: To finish the Deluxe Spiral we only have 2 steps left. The first is to take a 9/16" drill bit and drill a hole throught the slide where we will connect it to the pre assembled base from the first page of the asssembly. This can be tricky so its best to take this step and the next step and repeat both for each hole connecting SC-6 to the pre built assembly. Take note that the slide is a hard plastic but it can be streched to complete our mission.



This step needs to be combined with the previous step to ensure this gets done properly. After drilling a 9/16" Hole through the slide we are going to secure it to the base using a SHB-8 (3/8" x 3 1/2" Carriage bolt), SHB-1 (1/2" USS Flatwasher), SHB-2 (3/8" USS Flatwasher), SHB-3 (3/8" Split Lockwasher), SHB-4 (3/8" Hex Nut), SHB-5 (3/8" Acorn Nut). We are going to snug the slide to the inside of wall of the corner post. And repeat this step and the previous step until all croners have been drilled and lagged down.

