

# Installation Instructions

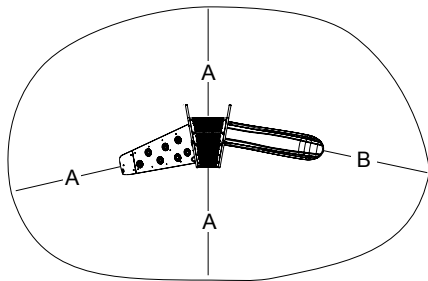
## Playworld Systems® Models XX0346 and XX0346S

### Unity Slide Climber

#### In-Ground and Surface Mount



Assembly View (representative structure)



**Use Zones**

**A Climber - Slide Side Use Zone**

- ASTM - 72 in. (1829 mm)
- CSA - 1800 mm
- EN - 1754 mm, (1000 mm sides of bedway)

**B Slide Runout Use Zone (A.S.T.M.) / (C.S.A.)**

- Height of Slide Entrance from Surfacing or
- ASTM - 72 in. (1829 mm) Minimum
- CSA - 1800 mm Minimum
- 2400 mm Maximum
- EN - 2000 mm

### Installation Preparation

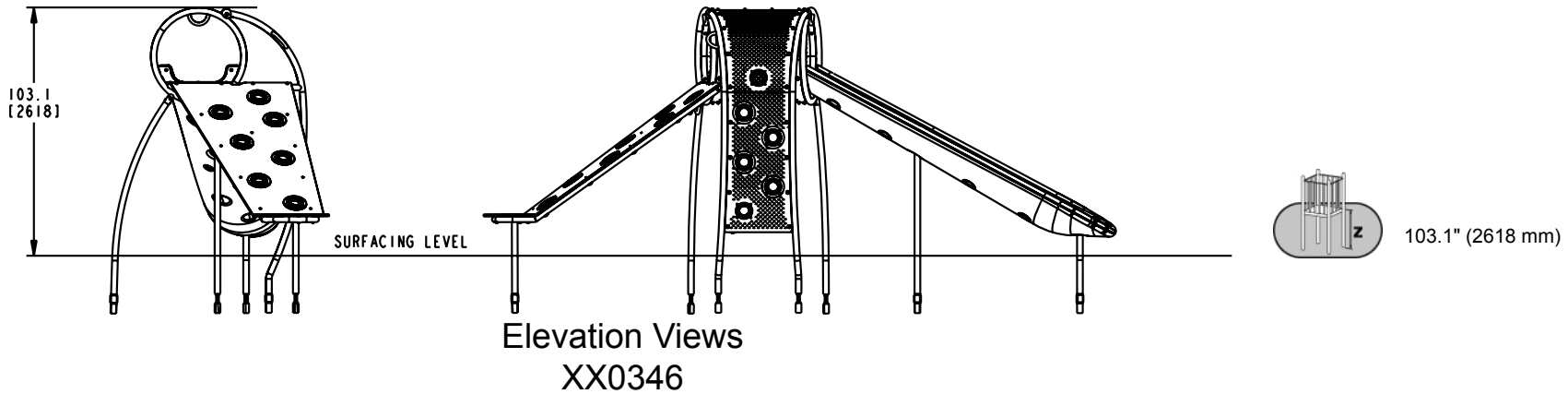
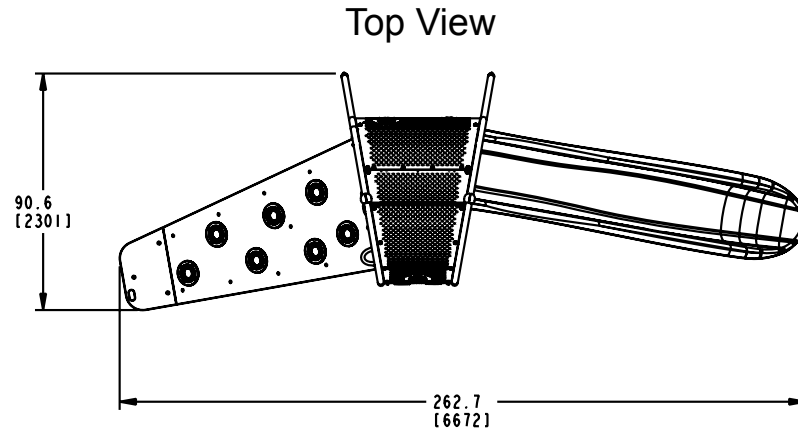
- Recommended Crew: ..... Three (3) adults
- Installation Time: ..... 12 man-hours (In-Ground)
- Installation Time: ..... 9 man-hours (Surface Mount)
- Concrete Required: ..... 0.21 cubic yard (0,14 cubic meters)
- Use Zone:..... Refer to the information below
- User Group Age (years): ..... ASTM/CSA: 5-12, EN: 6-14

ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do <b>Not</b> Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height



# Installation Instructions

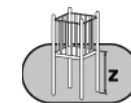
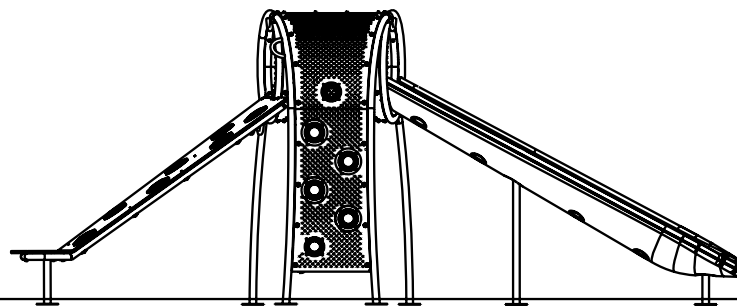
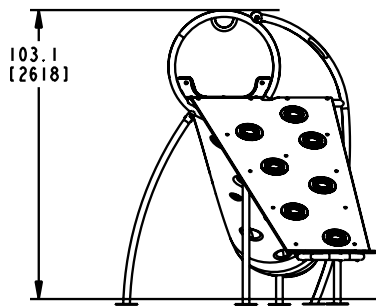
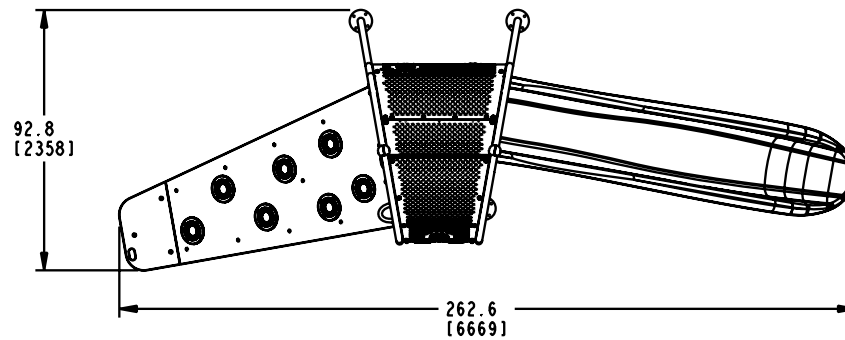
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



# Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

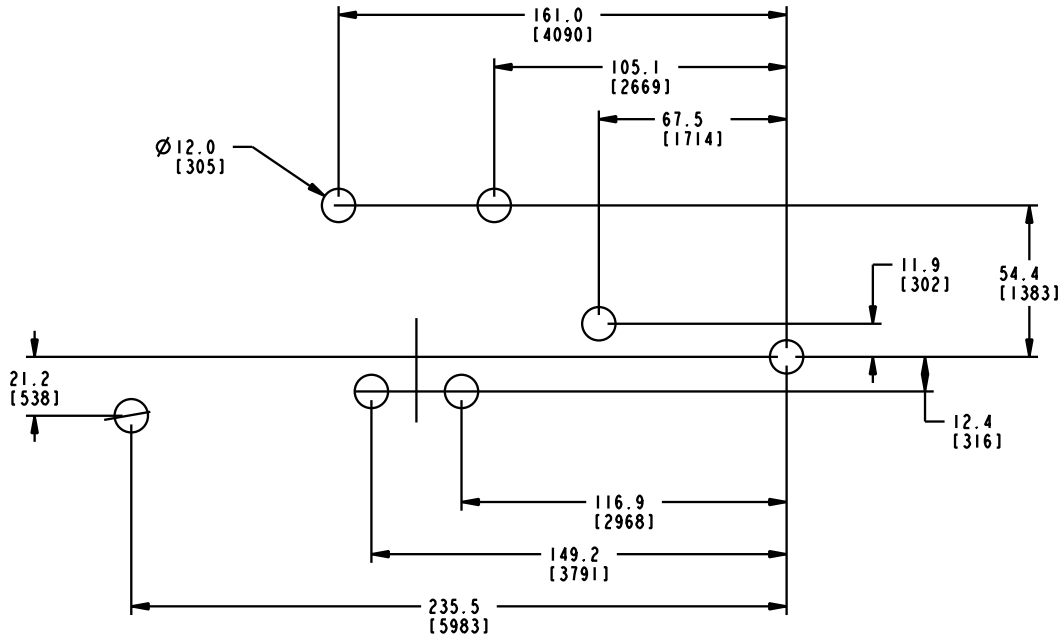
Top View



103.1" (2618 mm)

Elevation Views  
XX0346S

# Installation Instructions

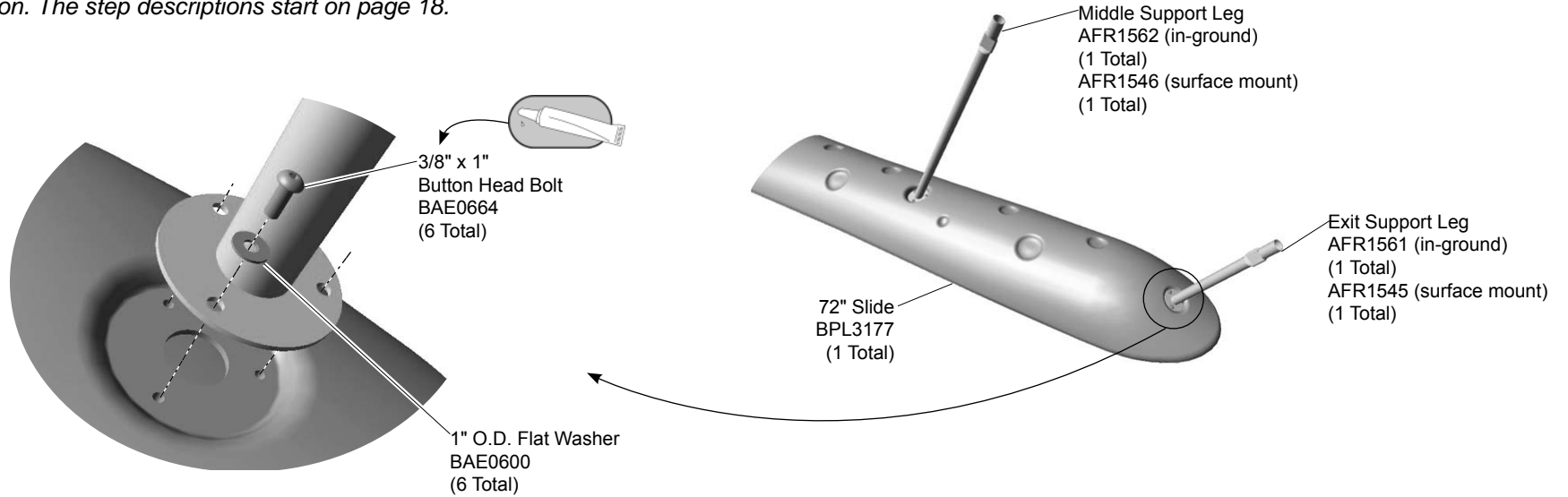


Footing Diagram  
(Both Models)



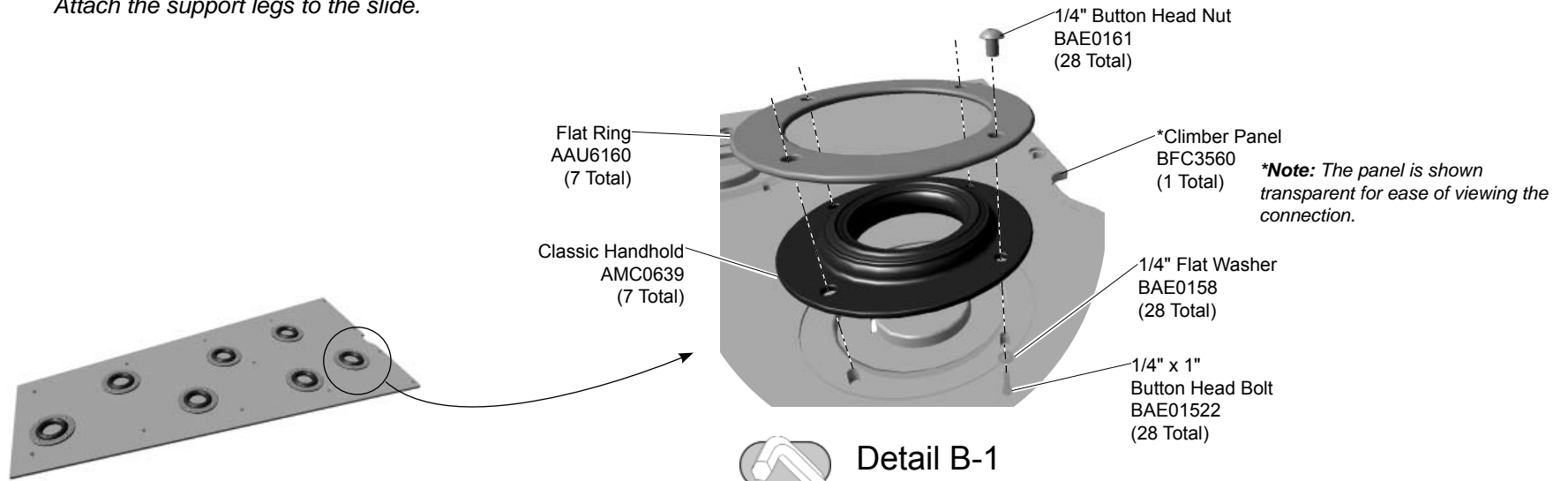
# Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 18.



## Detail A Step 4

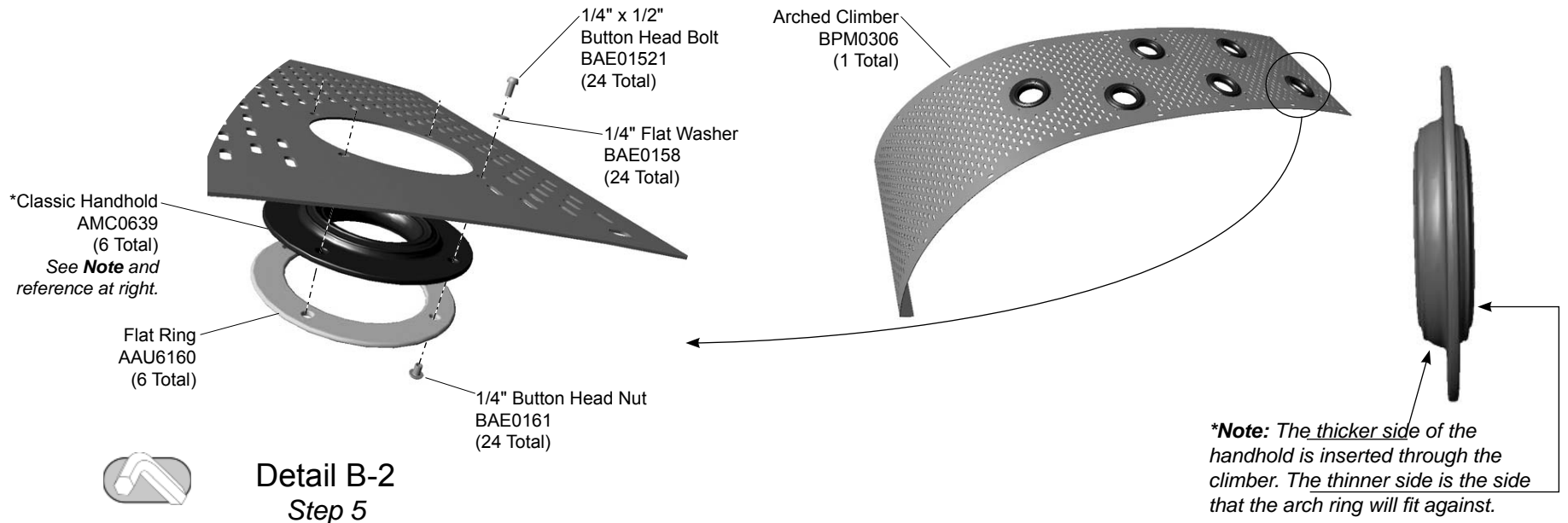
Attach the support legs to the slide.



## Detail B-1 Step 5

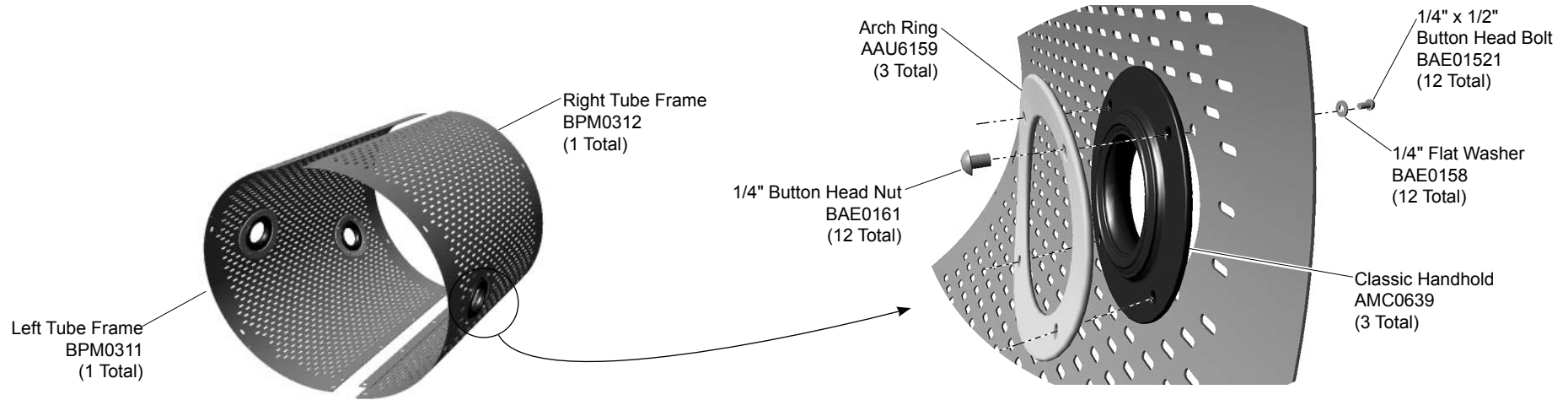
Attach the handholds to the incline climber.

# Installation Instructions



## Detail B-2 Step 5

Attach the handholds to the arched climber.

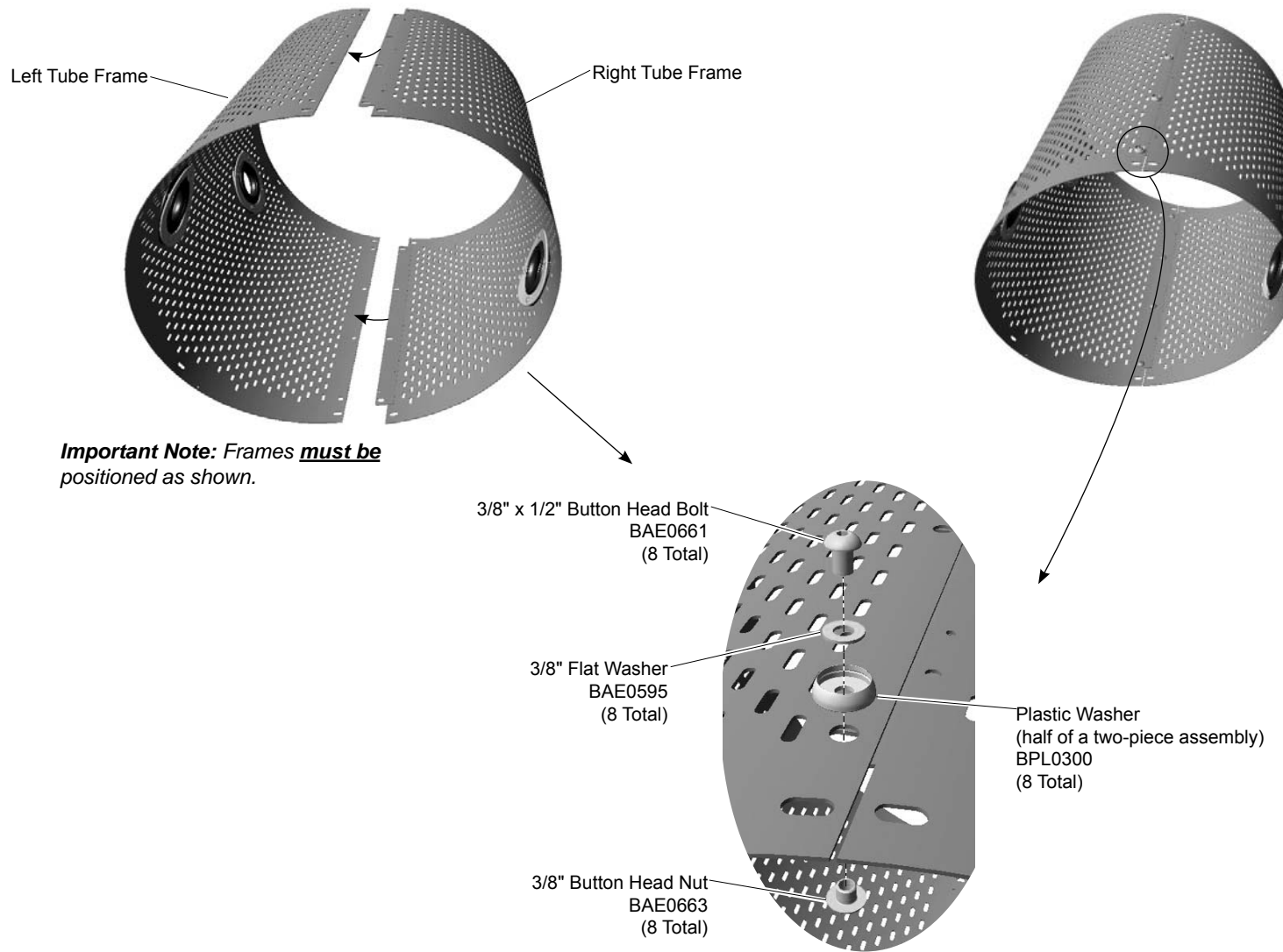


## Detail B-3 Step 5

Attach the handholds to the tube frames.



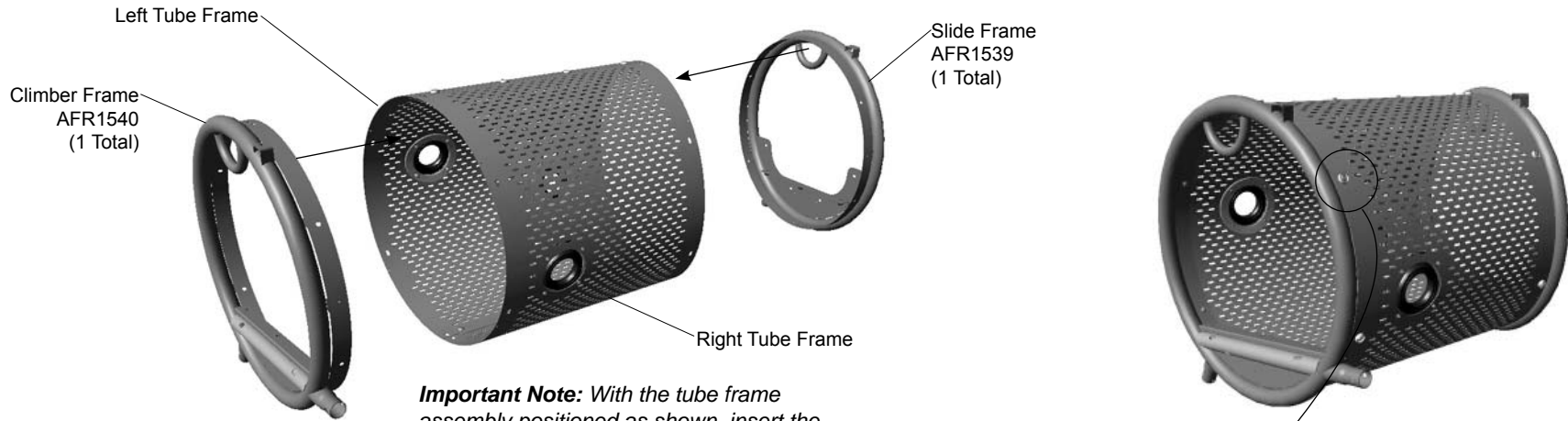
# Installation Instructions



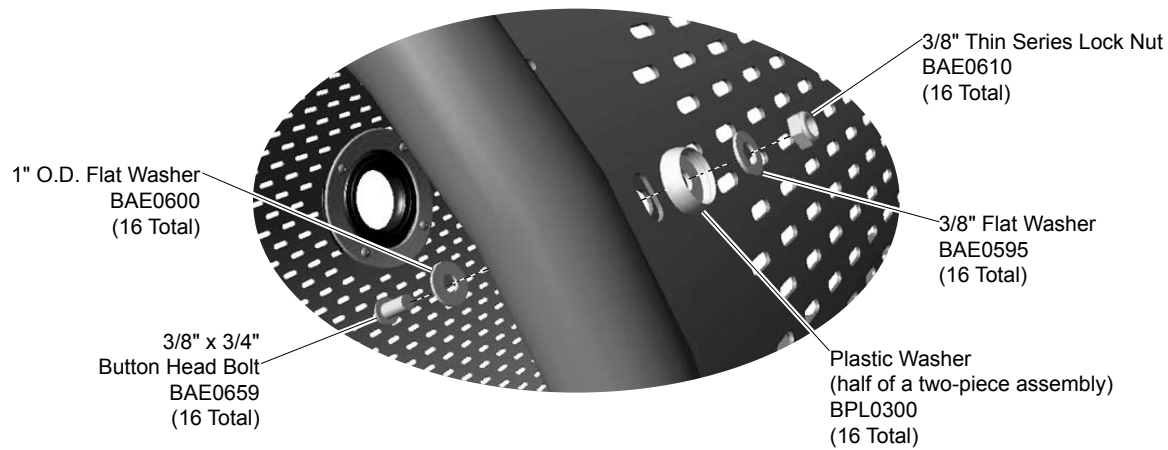
Detail C  
Step 6

Attach the tube frames together.

# Installation Instructions



**Important Note:** With the tube frame assembly positioned as shown, insert the climber frame and slide frame into the designated ends of the assembly.

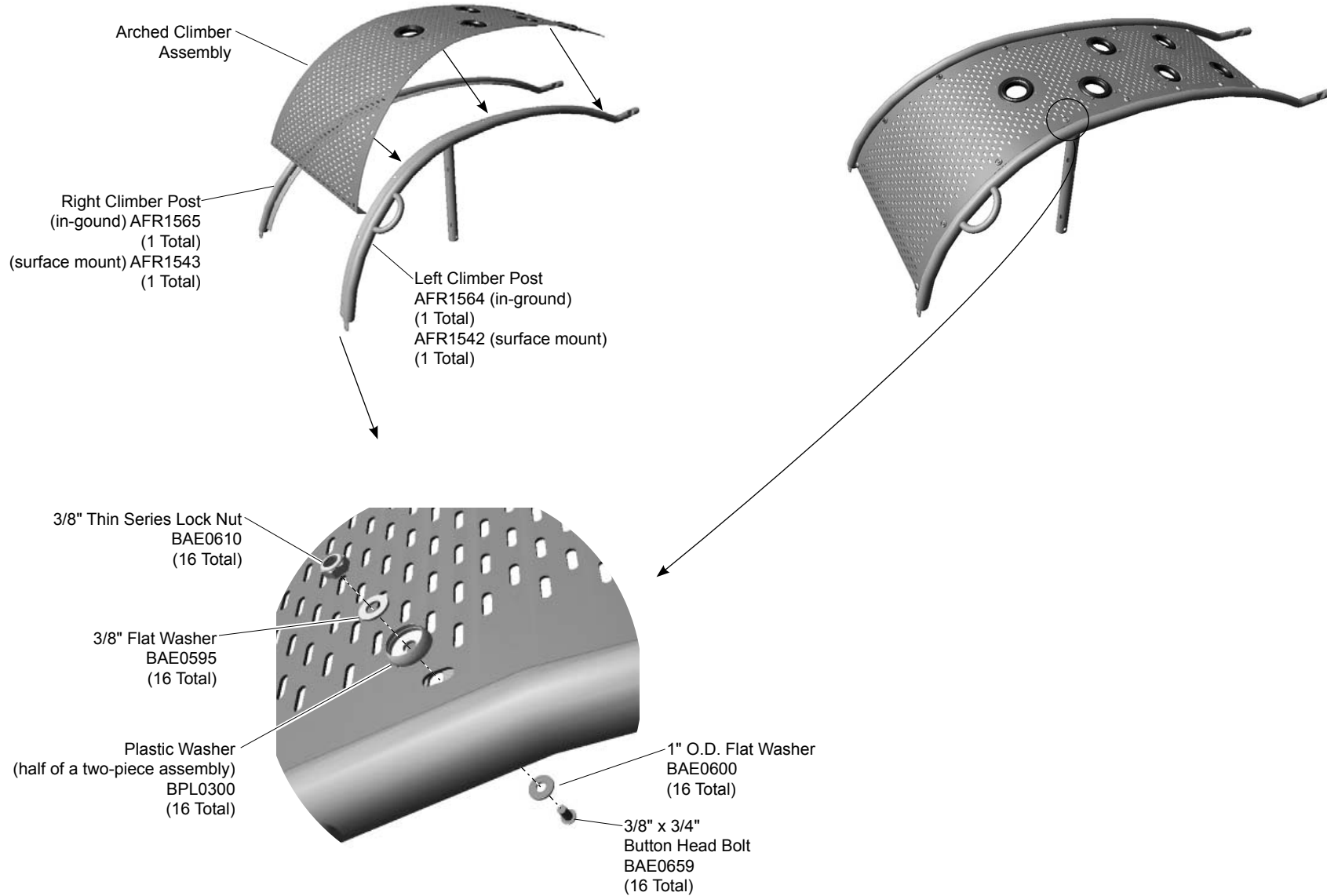


## Detail D Step 7

Attach the climber and slide frames to the tube frame assembly.



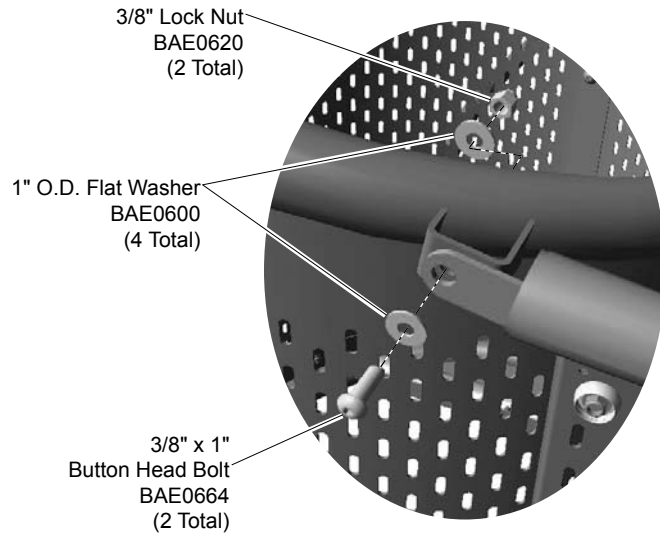
# Installation Instructions



## Detail E Step 8

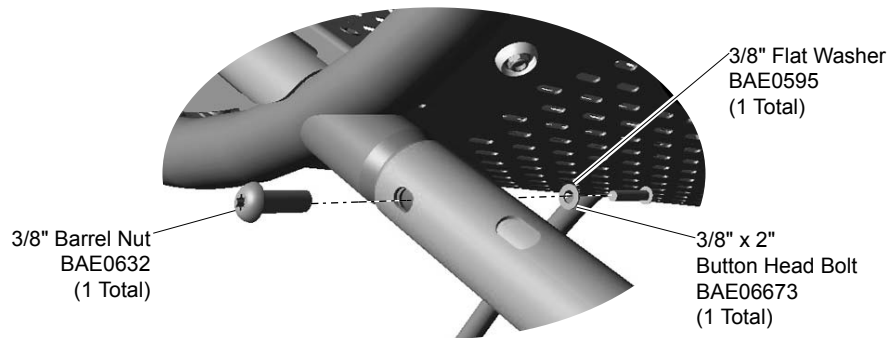
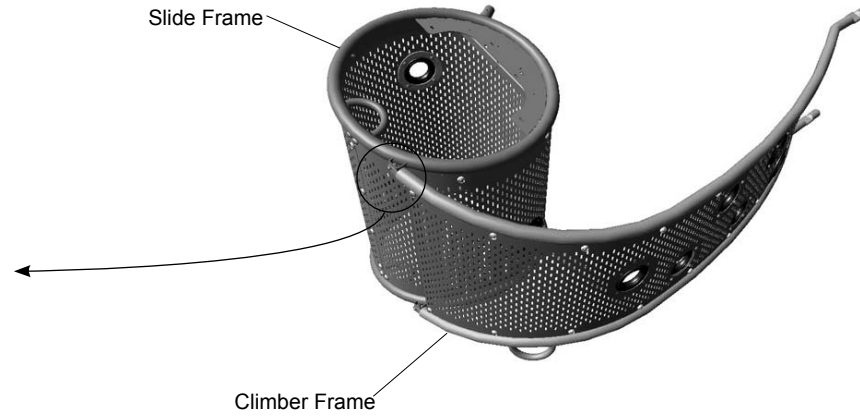
*Attach the arched climber assembly to the left and right climber posts.*

# Installation Instructions



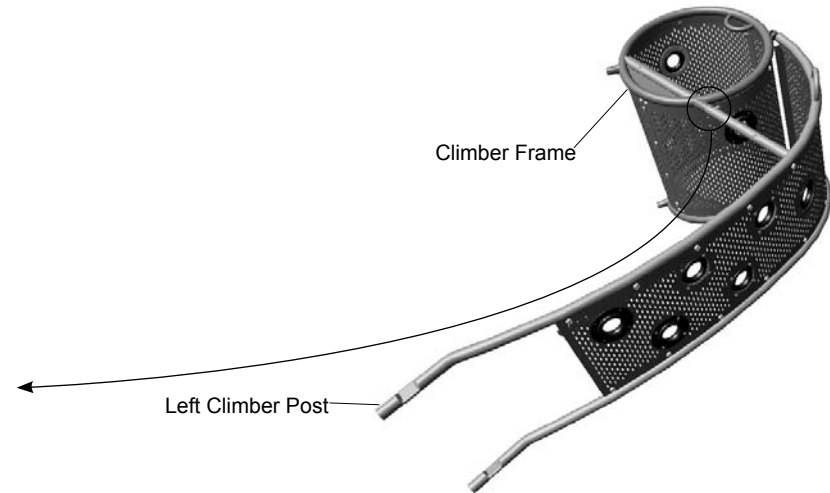
**Detail F-1**

*Attach the arched climber posts to the bracket on each tube frame.*



**Detail F-2**

*Attach the left climber post to the tube extension on the climber frame.*

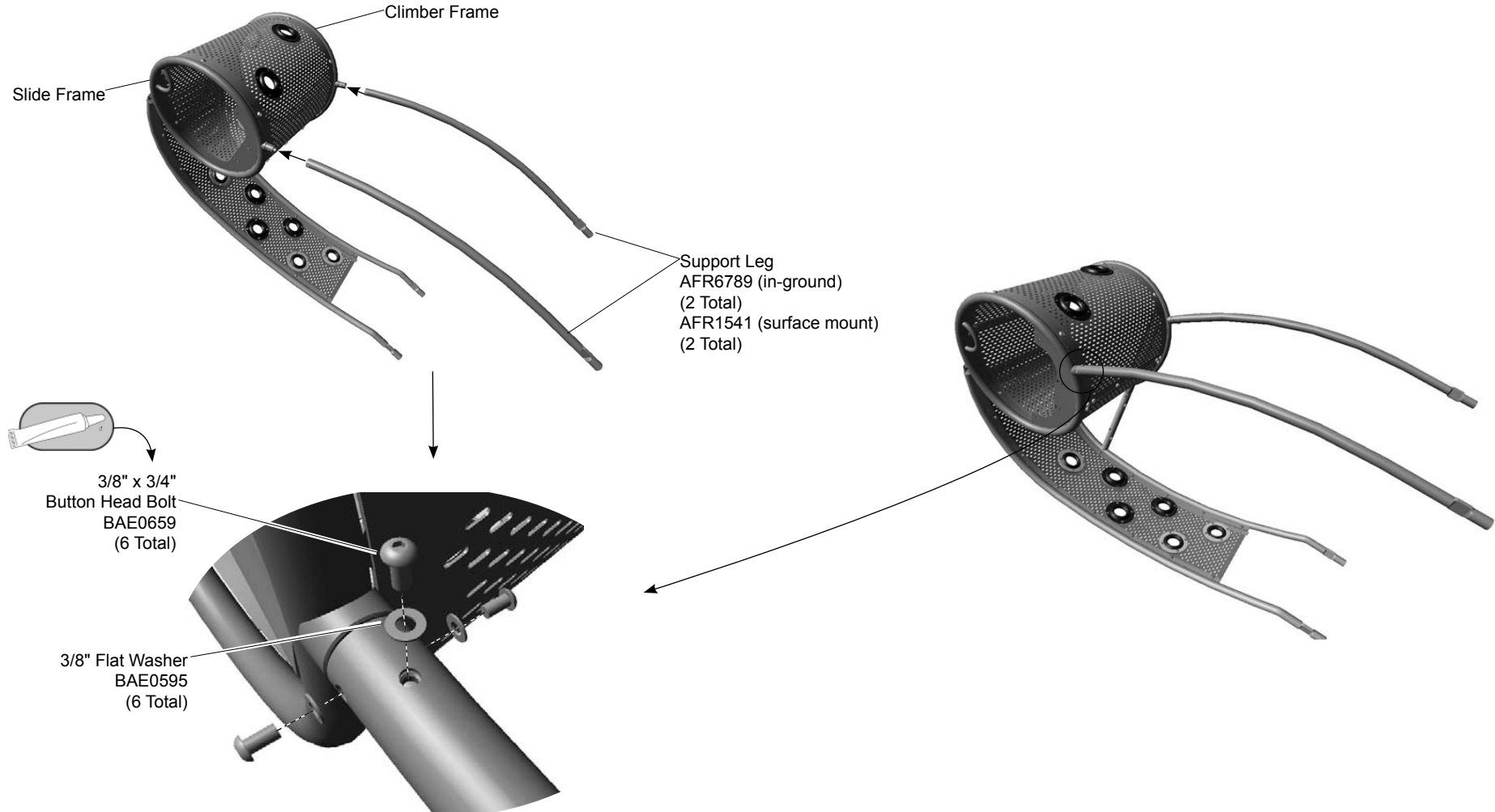


**Details F-1 and F-2**

**Step 9**

*Attach the arched climber assembly to the tube frame assembly.*

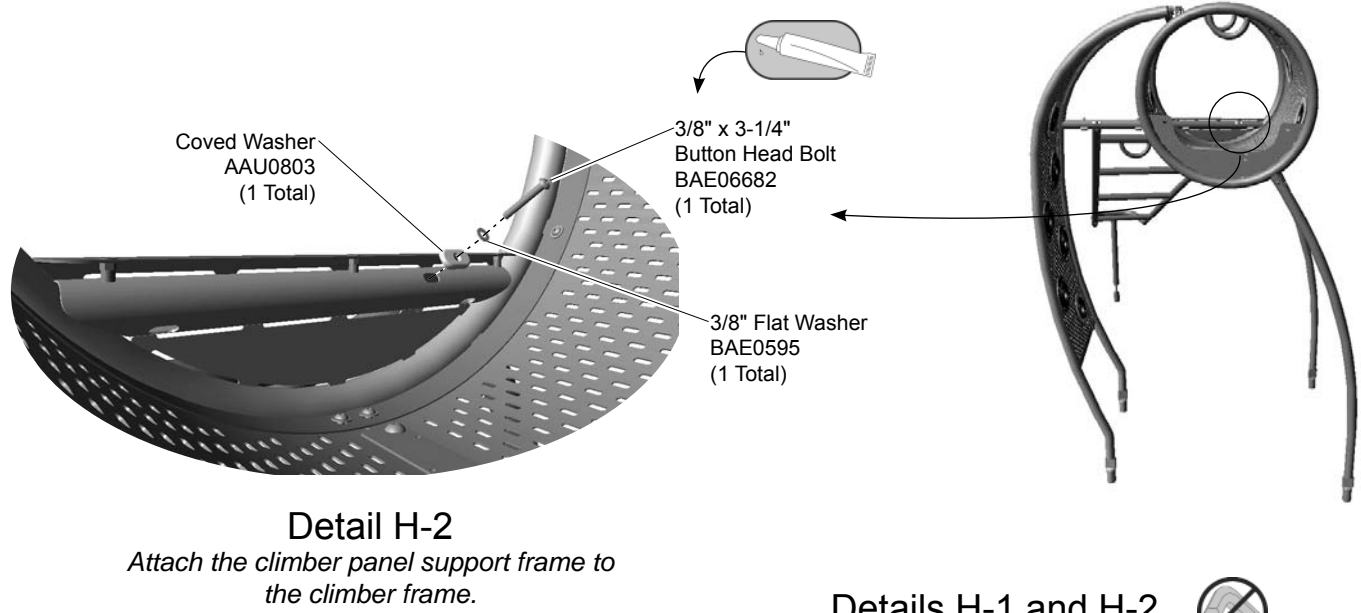
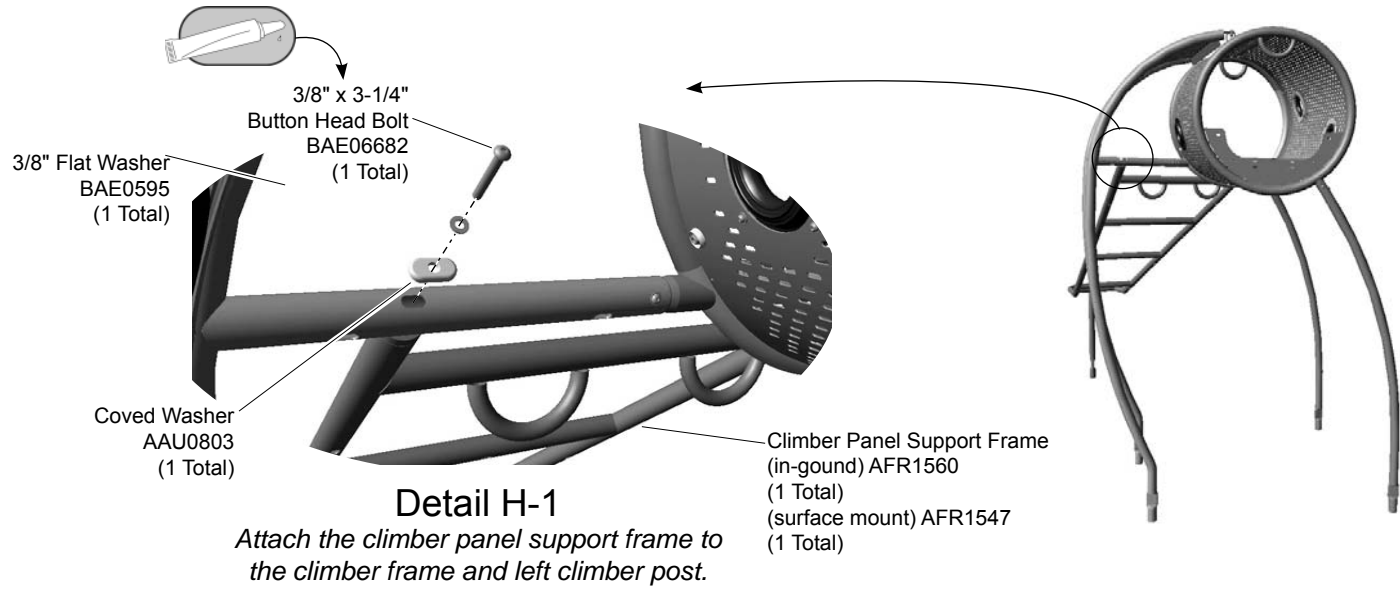
# Installation Instructions




## Detail G Step 10

*Attach support legs to the tube frame assembly.*

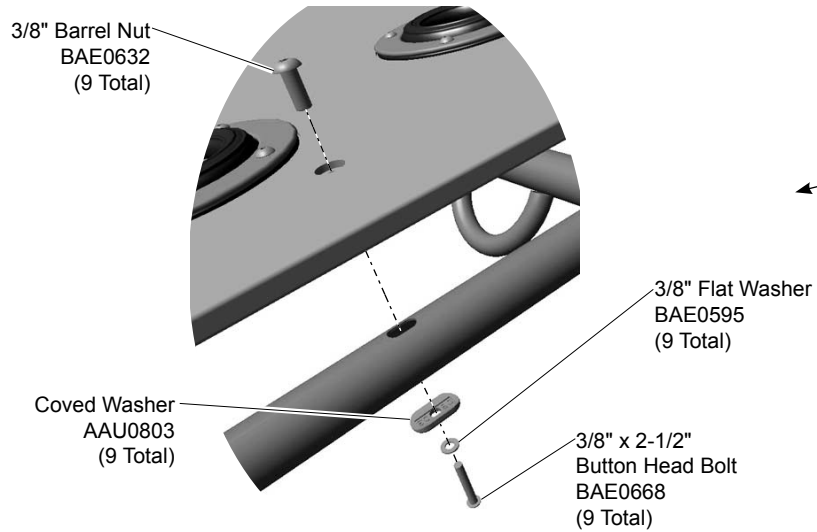
# Installation Instructions



**Details H-1 and H-2**   
 Step 11

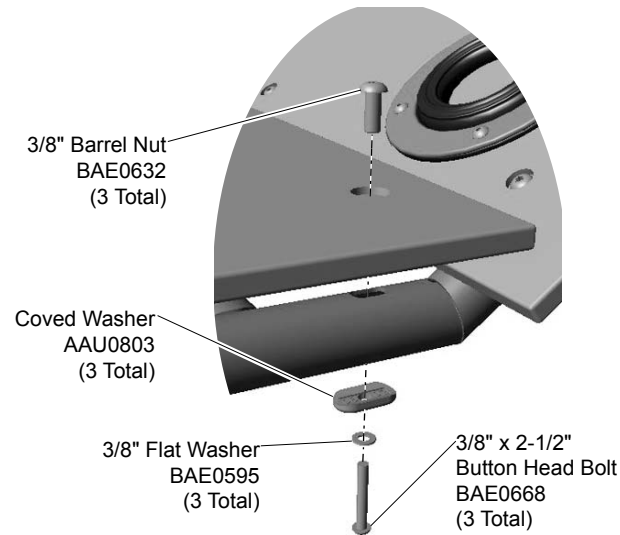
Attach the climber panel support frame to the climber frame and left climber post.

# Installation Instructions



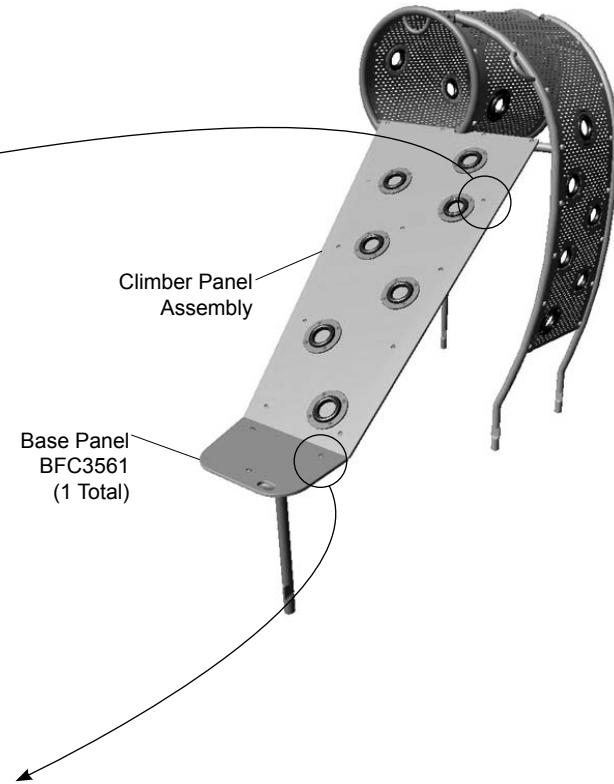
## Detail I-1

*Attach the climber panel to the climber panel support frame.*



## Detail I-2

*Attach the base panel to the climber panel support frame.*



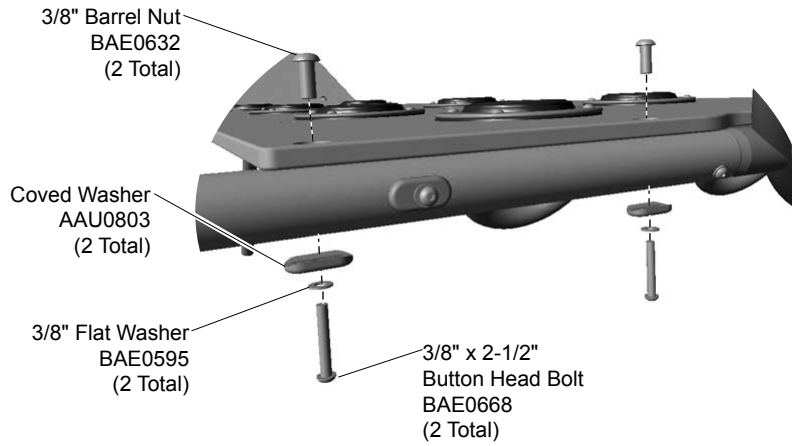
## Details I-1 and I-2

### Step 12

*Attach the climber panel and base panel to the climber panel support frame.*

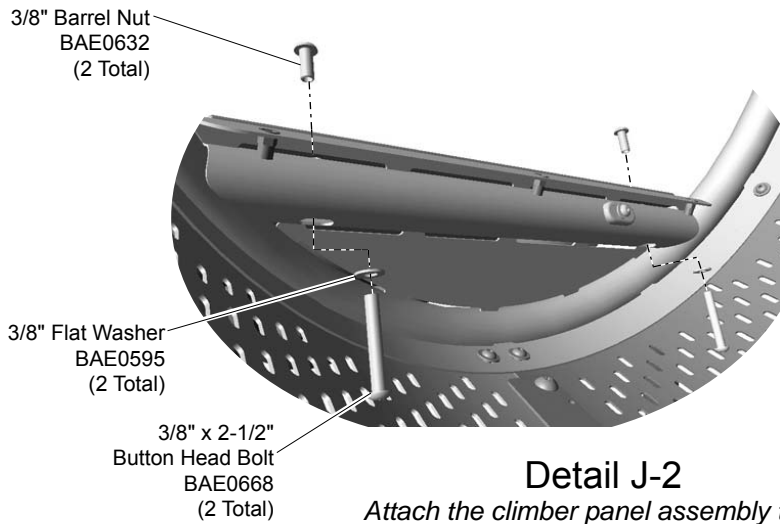


# Installation Instructions



## Detail J-1

*Attach the climber panel assembly to the climber frame and left climber post.*



## Detail J-2

*Attach the climber panel assembly to the climber frame.*

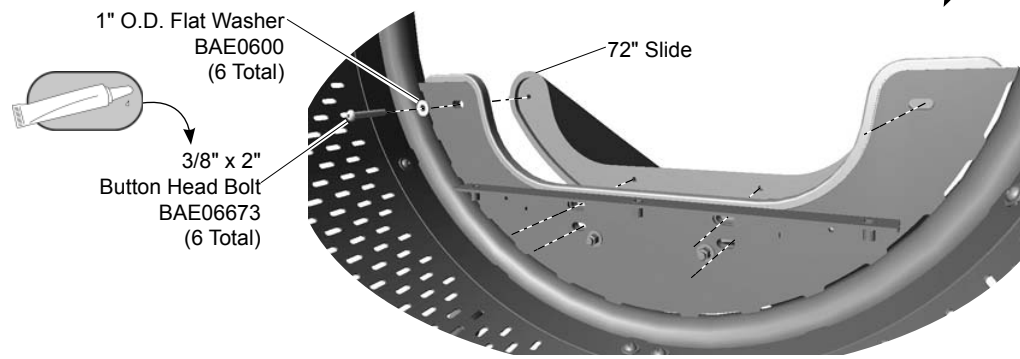
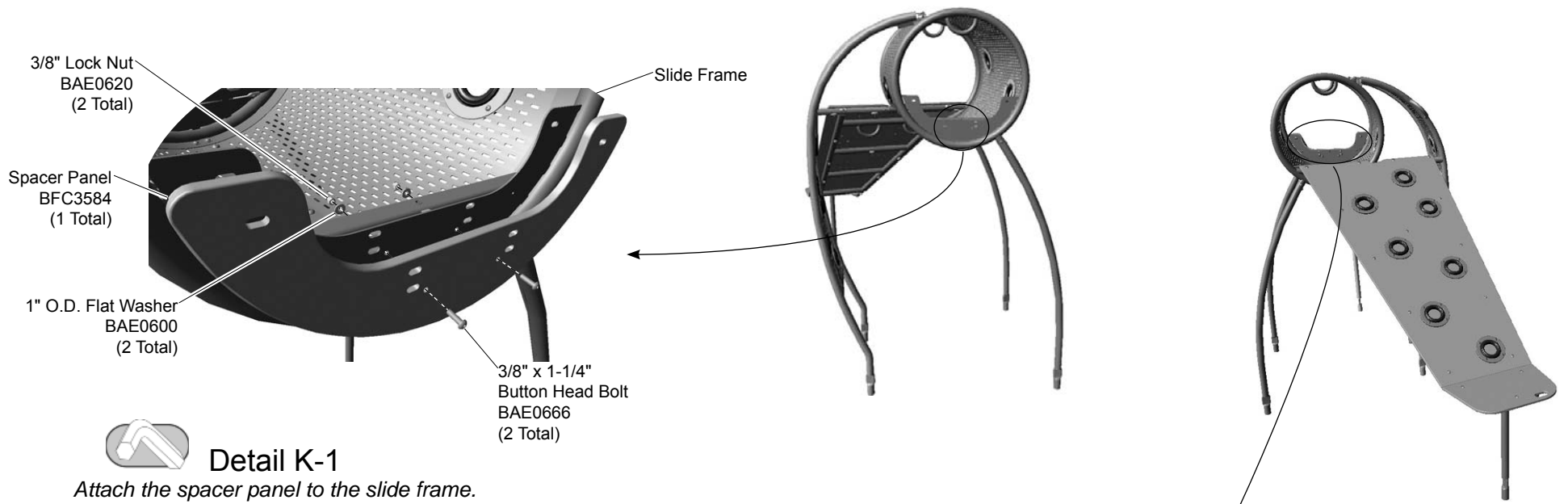


## Details J-1 and J-2 Step 13



*Attach the climber panel assembly to the climber frame and left climber post.*

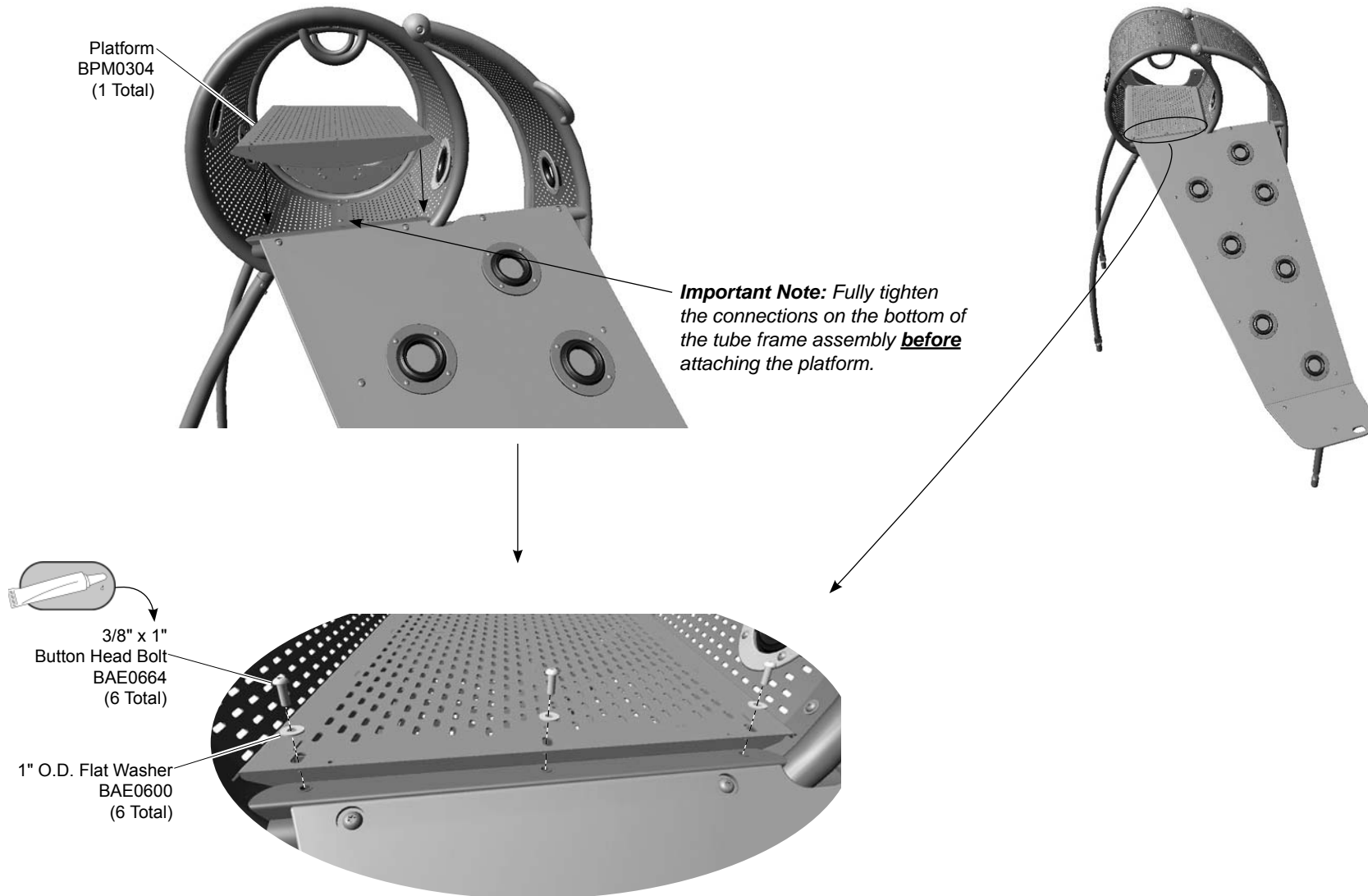
# Installation Instructions



**Detail K-2**   
*Attach the slide to the spacer/slide frame.*

## Details K-1 and K-2 Step 14 *Attach the slide to the tube frame*

# Installation Instructions

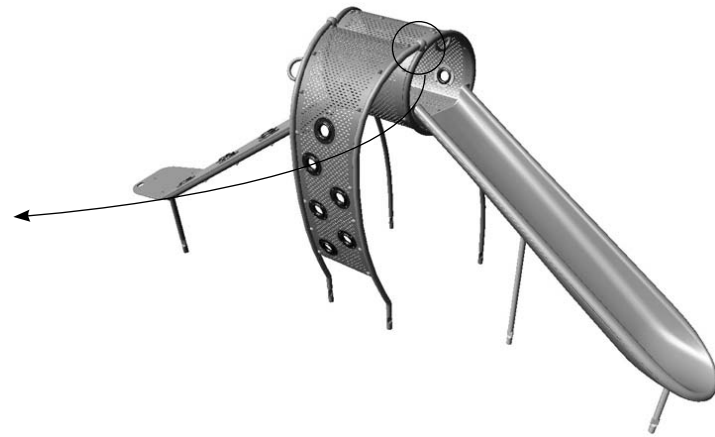
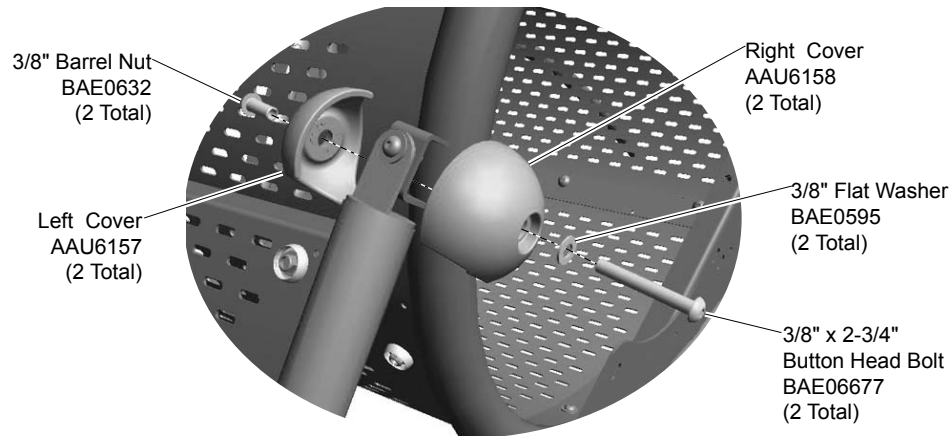


Detail L  
Step 15

Attach the platform to the tube frame



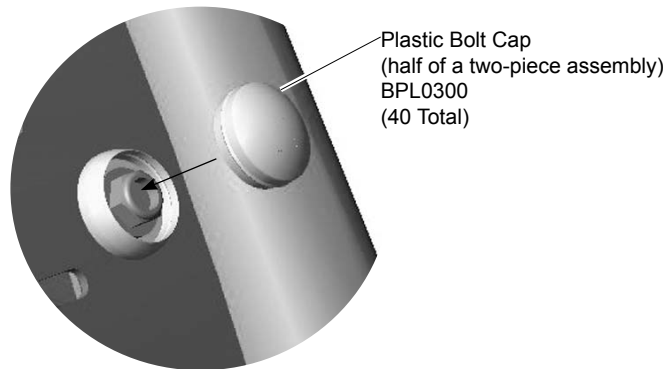
# Installation Instructions



## Detail M Step 17



*Attach the covers to the top of the archer climber.*



## Detail N Step 18

*Press the bolt caps into the plastic washers.*

# Installation Instructions

**Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete. Do not install bolt caps until the structure is completely assembled and properly footed.

**Carefully read and understand these installation instructions before you begin.**

**Step 1:** Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

**Step 2:** Separate and identify all components and hardware.

**Step 3:** Excavate, or prepare, the footings as shown in the **Component or Surface Mount Footing Details** in the *Annex* at the end of this document.

**Step 4:** Attach the support legs to the slide. See **Detail A**. Position the support legs against the appropriate location on the bottom of the slide, apply a drop of thread locking adhesive to the bolt threads and attach as shown. Fully tighten the connections according to tightening torque specifications.

**Torque Specifications:**

*Bolts and nuts* - Snug tighten and then tighten an additional one half turn.

**Step 5:** Attach the handholds to the incline climber, the arched climber and the tube frames. See **Details B-1, B-2 and B-3**. Position each handhold, flat ring or curved ring against the appropriate climber and frame and attach as shown. Fully tighten the connections according to tightening torque specifications.

**Note:** Handholds and rings attach on the inside of the arched climber and tube frames.

**Step 6:** Attach the tube frames together. See **Detail C**. Position the tube frames together and attach as shown.

**Important Note:** Frames **must be** positioned as shown.

**Step 7:** Attach the climber and slide frames to the tube frame assembly. See **Detail D**. With the tube frame assembly positioned as shown, insert the climber frame and slide frame into the designated ends of the assembly and attach as shown.

**Step 8:** Attach the arched climber assembly to the left and right climber posts. See **Detail E**. Place the arched climber on top of the climber posts and attach as shown. Climber posts must be positioned on the correct side of the arched climber.

**Step 9:** Attach the arched climber assembly to the tube frame assembly. See **Details F-1 and F-2**. Position the top of the climber posts against the bracket on each tube frame and the tube extension on the right climber post inserted over the tube extension on the climber frame attach as shown. Once attached and with adequate manpower place the component assembly in, or on, it's footing and block and brace in place.

**Step 10:** Attach support legs to the tube frame assembly. See **Detail G**. Slide the end of each support leg onto the tube extension of each tube frame and attach as shown.

**Step 11:** Attach the climber panel support frame to the climber frame and left climber post. See **Details H-1 and H-2**. With adequate manpower, place the climber panel support frame in, or on, it's footing and against the climber frame and left climber post and attach as shown. Apply a drop of thread locking adhesive to the bolt threads before making the connection.

**Step 12:** Attach the climber panel and base panel to the climber panel support frame. See **Details I-1 and I-2**. Position the climber panel assembly and the base panel on top of the support frame and attach as shown.

**Step 13:** Attach the climber panel assembly to the climber frame and left climber post. See **Details J-1 and J-2**. Make the connections as shown.

**Step 14:** Attach the slide to the tube frame assembly. See **Details K-1 and K-2**. Position the spacer panel against the slide frames, align the holes and attach as shown. Make sure the holes are aligned and fully tighten the connections. Position the slide in, or on, it's footings and against the spacer panel, apply a drop of thread locking adhesive to the bolt threads and attach as shown.

**Important Note:** Fully tighten the connections on the bottom of the tube frame assembly **before** attaching the platform.

**Step 15:** Attach the platform to the tube frame assembly. See **Detail L**. Set the platform on the tube frames, apply a drop of thread locking adhesive to the bolt threads and attach as shown.

**Final Details.**



# Installation Instructions

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**Step 16:** Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

**Torque Specifications:**

*Bolts and nuts* - Snug tighten and then tighten an additional one half turn.

**In-Ground:** Block and brace for concrete. Adjust the exit height of the slide so it will not hold water. Slide exit height can be adjusted to avoid retaining water but can be no less than 7 in. (178 mm) and no greater than 15 in. (381 mm) from the protective surfacing. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

**Surface Mount:** Bolt down all surface mount supports in accordance with specifications provided by your registered structural engineer.

**Important Note:** Surface mount hardware is not supplied. Customer is responsible for concrete base and for providing surface mount hardware as specified by a registered structural engineer for each specific project application.

**Step 17:** Attach the covers to the top of the arched climber. See **Detail M**. Position a left and right cover around the top of each connection of the arched climber posts to the tube frames (See Detail G-1) and attach as shown. Fully tighten the connections according to tightening torque specifications.

**Step 18:** Select plastic caps and press over the plastic flanged washers. See **Detail N**.

**Note:** The plastic caps install easier when they are warm.

**Step 19:** For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the component at eye level.

**XX0346 - UNITY SLIDE CLIMBER**

<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
AAU0803	WASHER - COVERED 1.13" x 2.25"	16	BPM0312	FAB METAL - TUBE HALF RIGHT	1
AAU6157	COVER - LEFT	2	ALB0025	LABEL - AGE APPROPRIATE SHEET	1
AAU6158	COVER - RIGHT	2			
AAU6159	RING - 9.50" O.D. x .25" - ARCH	3			
AAU6160	RING - 9.50" O.D. x .25" - FLAT	13			
AFM6789	FAB METAL - 2.38" O.D. x 7.75" x 72.07"	2			
AFR1539	FRAME - SLIDE WITH RIVNUTS	1			
AFR1540	FRAME - CLIMBER WITH RIVNUTS	1			
AFR1560	FRAME - CLIMBER	1			
AFR1561	POST - 32.91" EXIT SUPPORT	1			
AFR1562	POST - CENTER SLIDE LEG 68.69"	1			
AFR1564	FRAME - LEFT	1			
AFR1565	FRAME - RIGHT	1			
AMC0639	NEW CLASSIC HANDHOLD	16			
BAE01521	BOLT - 1/4"-20 x 1/2" BUTTON HEAD - S.S.	36			
BAE01522	BOLT - 1/4"-20 x 1" BUTTON HEAD - S.S.	28			
BAE0158	WASHER - 1/4" SAE FLAT	64			
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	64			
BAE0595	WASHER - 3/8" SAE FLAT	67			
BAE0600	WASHER - 1" O.D. FLAT	56			
BAE0610	NUT - 3/8"-16 THIN LOCK	32			
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4			
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	19			
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - S.S.	38			
BAE0661	BOLT - 3/8"-16 x 1/2" BUTTON HEAD - S.S.	8			
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	8			
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - S.S.	14			
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - S.S.	2			
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - S.S.	7			
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - S.S.	2			
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - S.S.	16			
BAE06682	BOLT - 3/8"-16 x 3-1/4" BUTTON HEAD - S.S.	2			
BFC3560	SHEET - CLIMBER	1			
BFC3561	SHEET - 18.50" x 30.06" x .75"	1			
BFC3584	SHEET - 13.97" x 33.76"	1			
BPL0300	CAP - 3/8" BOLT	40			
BPL3177	SLIDE - 72"	1			
BPM0304	PLATFORM - 29.65" x 48.29" x 4.36"	1			
BPM0306	FAB METAL - 36.38" x 105.88" x 12 GA	1			
BPM0311	FAB METAL - CRAWL TUBE	1			



## XX0346S - UNITY SLIDE CLIMBER SURFACE MOUNT

PART NO.	DESCRIPTION	QTY.	PART NO.	DESCRIPTION	QTY.
AAU0803	WASHER - COVED 1.13" x 2.25"	16	BPM0312	FAB METAL - TUBE HALF RIGHT	1
AAU6157	COVER - LEFT	2	ALB0025	LABEL - AGE APPROPRIATE SHEET	1
AAU6158	COVER - RIGHT	2			
AAU6159	RING - 9.50" O.D. x .25" - ARCH	3			
AAU6160	RING - 9.50" O.D. x .25" - FLAT	13			
AFR1539	FRAME - SLIDE WITH RIVNUTS	1			
AFR1540	FRAME - CLIMBER WITH RIVNUTS	1			
AFR1541	FRAME - BENT LEG	2			
AFR1542	FRAME - LEFT (SM)	1			
AFR1543	FRAME - RIGHT (SM)	1			
AFR1545	POST - 11.16" EXIT SUPPORT (SM)	1			
AFR1546	POST - CENTER SLIDE LEG 46.99"	1			
AFR1547	FRAME - CLIMBER	1			
AMC0639	NEW CLASSIC HANDHOLD	16			
BAE01521	BOLT - 1/4"-20 x 1/2" BUTTON HEAD - S.S.	36			
BAE01522	BOLT - 1/4"-20 x 1" BUTTON HEAD - S.S.	28			
BAE0158	WASHER - 1/4" SAE FLAT	64			
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	64			
BAE0595	WASHER - 3/8" SAE FLAT	67			
BAE0600	WASHER - 1" O.D. FLAT	56			
BAE0610	NUT - 3/8"-16 THIN LOCK	32			
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4			
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	19			
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - S.S.	38			
BAE0661	BOLT - 3/8"-16 x 1/2" BUTTON HEAD - S.S.	8			
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	8			
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - S.S.	14			
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - S.S.	2			
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - S.S.	7			
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - S.S.	2			
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - S.S.	16			
BAE06682	BOLT - 3/8"-16 x 3-1/4" BUTTON HEAD - S.S.	2			
BFC3560	SHEET - CLIMBER	1			
BFC3561	SHEET - 18.50" x 30.06" x .75"	1			
BFC3584	SHEET - 13.97" x 33.76"	1			
BPL0300	CAP - 3/8" BOLT	40			
BPL3177	SLIDE - 72"	1			
BPM0304	PLATFORM - 29.65" x 48.29" x 4.36"	1			
BPM0306	FAB METAL - 36.38" x 105.88" x 12 GA	1			
BPM0311	FAB METAL - CRAWL TUBE	1			



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### Clamps

- Inspect clamps to insure they are properly secured to the support posts.
- Use the supplied torx-style tamper-resistant bit to insure bolt connection is tight.
- Visually inspect clamps for cracks or breakage. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

### Fasteners

- Inspect for loose fasteners.  
Tightening torque specifications are:  
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

### Slide

- Inspect entire sliding surface for obstructions, sharp points, cracks or jagged edges. If any damage to sliding surface is detected and is determined to be unsafe, barricade component to prevent use until repair is completed. Minor burrs or sharp edges may be removed by using a sharp utility knife or block plane to remove sharp burr.
- Inspect the exit region of slide for standing water. If standing water is detected, lower the exit region to provide a downward slope.

**Note:** This will require the footing of the end support leg to be adjusted deeper.

### Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

### Plastic Parts

- Inspect all plastic surfaces for sharp points, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed. Minor burrs or sharp edges may be removed by using a sharp utility knife or block plane to remove sharp burr.

### Castings

- Inspect the aluminum castings to insure they are properly secured to the component.
- Visually inspect the castings for cracks or breakage. If any damage is detected, barricade the equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

### Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

### Finish

- Inspect metal parts for finish damage.  
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.  
To repair the Eco-Armor® coating, contact the Playworld Systems' Customer Service Department for a coating repair touch-up kit.

### Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

### Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

## Equipment Maintenance Playworld Systems® Models XX0346 and XX0346S Unity Slide Climber In-Ground and Surface Mount



# Inspection Form

## Preventive Maintenance

**... for Safety's Sake!**

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

### INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect plastic parts for damage.	Medium			
Inspect sliding surface for obstructions and damage.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			
Inspect surfacing to insure proper depth and distribution.	High			

<b>Inspection Codes</b>
<b>P</b> = Pass <b>F</b> = Fail
<b>NA</b> = Not Applicable

Inspector: Name (Please Print) \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

### MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_





**Important ! Please Read Completely Before Beginning Installation.** According to a report published by the U. S. Consumer Product Safety Commission (C.P.S.C.) 72% of all playground injuries result from accidental falls. With this in mind, this equipment is designed to fill the need for safe yet challenging play. In conjunction with design efforts to reduce the possibilities of injuries, this equipment **must** be installed "Step by Step" per our installation instructions. As a new owner you are responsible for the correct installation, safe use, and maintenance of your equipment.

### Installation Guidelines

- Identify all parts and thoroughly read the assembly instructions before beginning construction.
- Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and no-encroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.
- If the stationary play equipment contains a slide (or slides), the use zones of the slide (or slides) may not be overlapped by the use zones of adjacent play equipment.
- **ASTM compliance:** The overall use zone measurements for stationary play equipment should extend a minimum of 72 inches (1829 mm) from its perimeter; dimensions and configuration of the use zone are dependent upon the types of included play equipment. The use zone of stationary play equipment may be overlapped by the use zone of adjacent stationary play equipment if the adjacent designated play surfaces are no greater than 30 inches (762 mm) above the protective surfacing level. They should be a minimum of 72 inches (1829 mm) apart. If the adjacent designated play surfaces are greater than 30 inches (762 mm) above the protective surfacing level, the pieces of equipment should be a minimum of 108 inches (2743 mm) apart.  
The use zone in front of the slide exit shall be a minimum of 72 inches (1829 mm) and shall not exceed 96 inches (2438 mm). The use zone shall be measured from the end of the slide and equal the vertical measurement as measured from the highest point of the sliding surface to the protective surfacing at the slide exit.  
**Example:** If the highest point of the sliding surface is 73.5 inches (1867 mm), the use zone in front of the slide exit should measure 73.5 inches (1867 mm).

- **CSA compliance:** The overall use zone measurements for stationary play equipment should extend a minimum of 1800 mm from its perimeter; dimensions and configuration of the use zone are dependent upon the types of included play equipment. The use zone of stationary play equipment may be overlapped by the use zone of adjacent stationary play equipment if the adjacent designated play surfaces are no greater than 700 mm above the protective surfacing level. They should be a minimum of 1800 mm apart.

The use zone in front of the slide exit shall be a minimum of 1800 mm) and shall not exceed 2400 mm. The use zone shall be measured from the end of the slide and equal the vertical measurement as measured from the highest point of the sliding surface to the protective surfacing at the slide exit.

A no-encroachment zone is also required for the exit of a slide higher than 48" (1219 mm). In addition to the use zone measurement at the runout of the slide, the no-encroachment zone will extend an additional 1800 mm and may not be overlapped by the use or no-encroachment zones of adjacent play equipment.

- **EN compliance:** The overall use zone measurements for stationary play equipment are dependent upon the fall height of the equipment. For a fall height exceeding 1500 mm a formula is applied to determine the use zone (impact zone) of the equipment. There is a minimum of 1500 mm from its perimeter; dimensions and configuration of the use zone are dependent upon the types of included play equipment. Refer to the Use Zone diagram or master structure drawing.

The use zone at the end of the slide runout will be at least 2000 mm for Type 1 slides. (All Playworld Systems slides are Type 1)

- Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.
- Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.
- After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.

## Guidelines

- Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.
- Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. **Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.**
- Insure that Age Appropriate and Hard Surface Warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.
- **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. **Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.**
- The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. Critical fall heights for Europe and Canadian compliance shall be listed on the elevation page or master structure drawing if they differ from the ASTM standard. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

**Tools Required:** Playworld Systems supplies a service kit that contains commonly used hex key wrenches required to assemble your equipment. You may also need: shovel, digging iron, post hole digger, steel rake, wheelbarrow, garden hoe, water hose, tape measure, level, alignment tool, 3/8" ratchet with 9/16" socket, and 9/16" combination wrench.

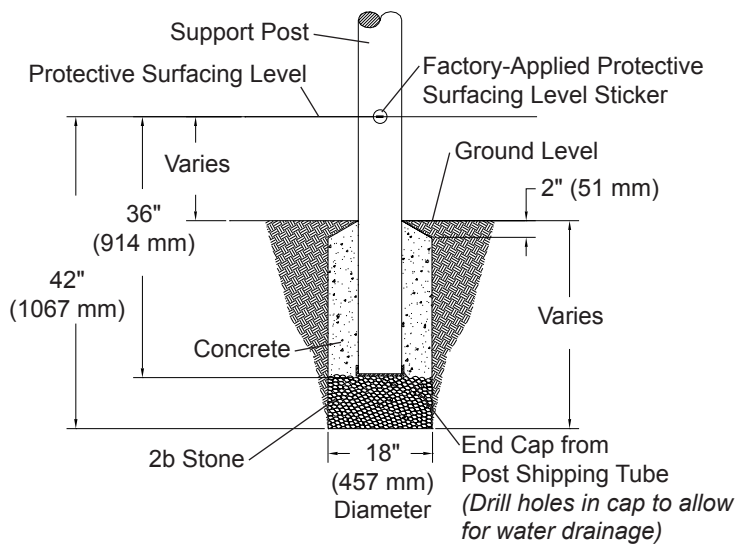
### Maintenance

- Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, **a comprehensive maintenance program must be developed for each playground and strictly followed.** All equipment must be inspected frequently for any potential hazards. Special attention must be given to moving parts and other components that can be expected to wear. Inspections must to be carried out in a systematic manner by trained personnel. Any damaged or worn parts, or any other hazards identified during inspections must be repaired or replaced immediately. Complete documentation of all maintenance inspections and repairs must be retained.

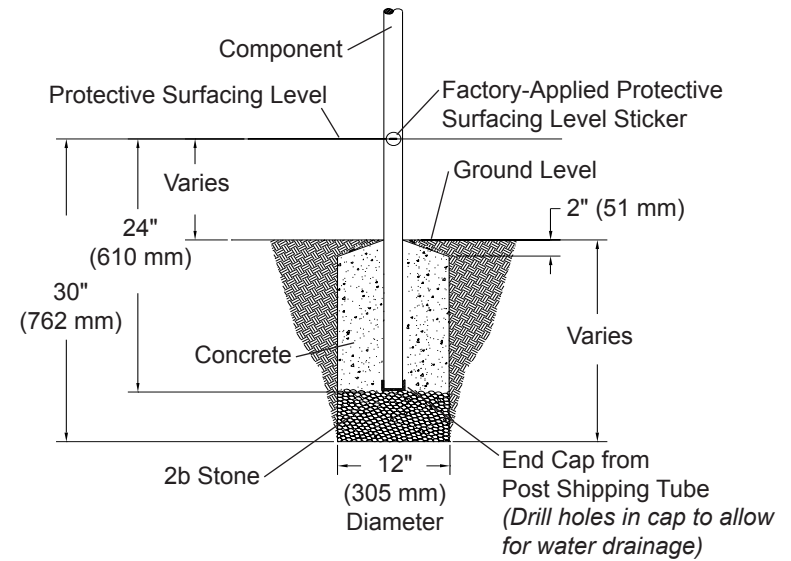
### Supervision Guidelines

- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.
- It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.
- Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.
- Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.
- Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.

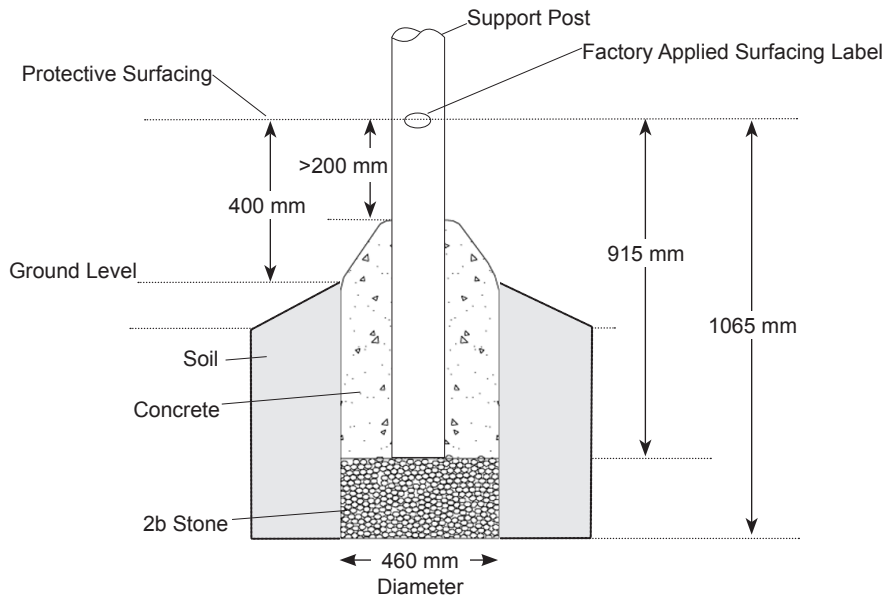
# Footings Details (in ground)



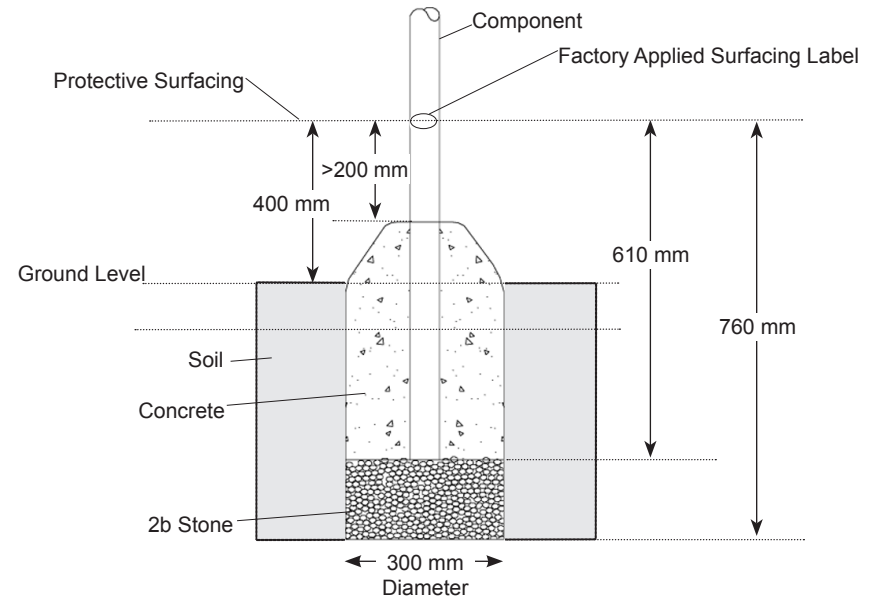
Support Post Footing Detail (ASTM/CSA)



Component Footing Detail (ASTM/CSA)

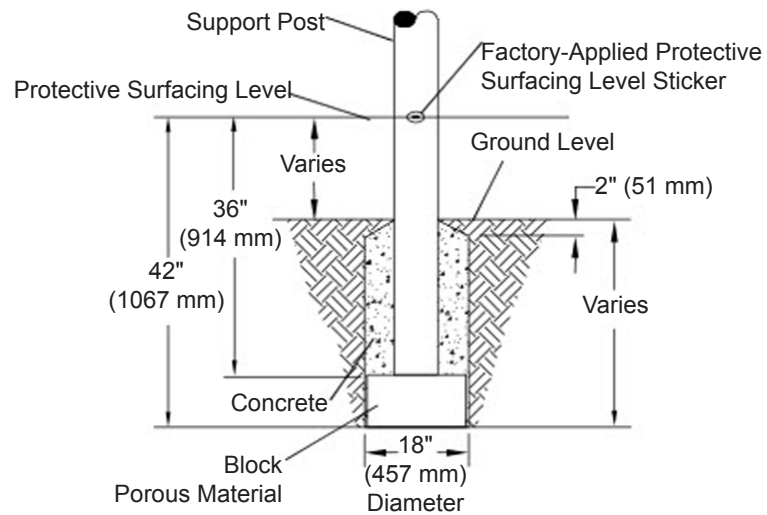


Footing Detail Support Post (EN)

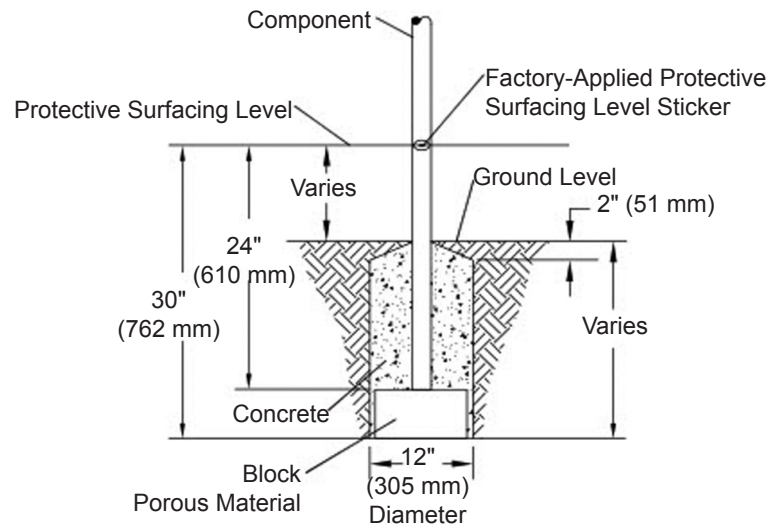


Footing Detail Component Post (EN)

# Footings Notes & Details



Support Post Footing Detail (ASTM/CSA)  
Block Option

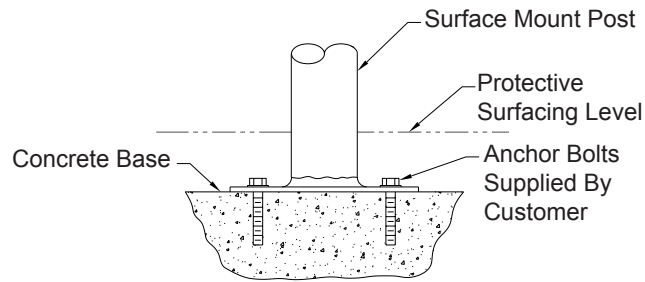


Component Footing Detail (ASTM/CSA)  
Block Option

## FOOTING NOTES (IN GROUND)

- Support post footing depth equals 42 in. (1067 mm) minus the depth of the protective surfacing material. The posts are designed to have 24" (610 mm) in concrete.  
*Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- Component footing depth equals 30 in. (762 mm) minus the depth of the protective surfacing material. The posts are designed to have 12" (305 mm) in concrete.  
*Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 18 in. (457 mm).
- Most support posts and component support legs will have either a factory-applied sticker with a line, or factory-applied mark designating the level of protective surfacing on a clear and level installation site. The footing depth measurements are based on this line/mark.
- If the play equipment is installed on uneven terrain, maintain support post mark for the protective surfacing level at the lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase the bottom of the support post in concrete. Place the post directly on packed stone or other porous material.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.  
For example:
  - If local soil is loose or unstable, a larger footing may be required.
  - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- The base of the footing must be below the frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.

## Footing Notes & Details



Surface Mount Footing Detail

### FOOTING NOTES (SURFACE MOUNT)

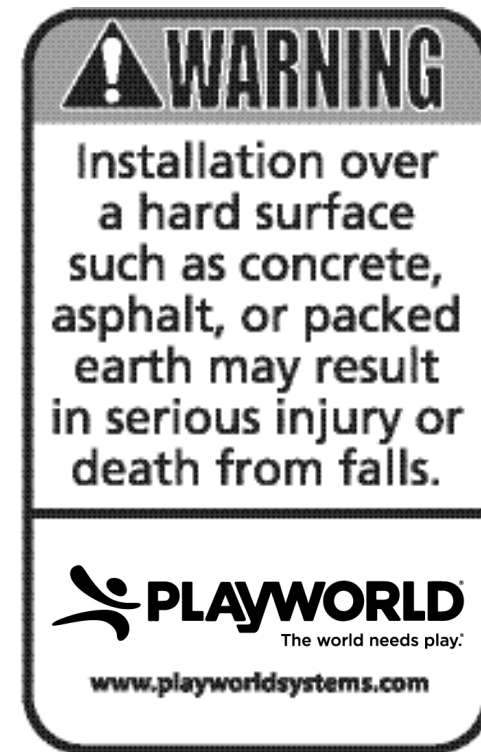
- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If the play equipment is installed on uneven terrain, maintain support post mark for the protective surfacing level at the lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- The footing size may vary due to local soil and weather conditions.
- Base of footing must be below frost line.

**Surface mount hardware is not supplied. Customer is responsible for concrete base and providing surface mount hardware as specified by a registered structural engineer for each specific project application.**

## FINAL INSPECTION

- Playworld Systems® insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard or specifications appropriate for the fall height of each structure.
- Playworld Systems® strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently. Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
  - Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
  - Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
  - Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
  - Insure all exposed pipe ends have properly installed end caps. Insure that drive rivets are secure.
  - Clean dried concrete off of components and any other affected surface.
  - Touch-up any scratches or installation damage to powder coated finish with color-matched spray paint.
  - Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.
  - Insure that protective surfacing is properly installed according to C.P.S.C. (or other appropriate body) recommendations. Footings must not be exposed.

- Insure that hard surface warning/Playworld Systems® identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For locations complying with ASTM F1487 or CSA Z-614, Age Appropriate labels must also be applied in a visible location.
- Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



Surfacing Warning Label