# **APPENDIX A:**

# PLAYGROUND EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS



Order Number
Job Name
Structure Number

## **GENERAL CONFORMITY CERTIFICATION**

As required by the Consumer Product Safety Improvement Act of 2008, Public Law 110-314 122 Stat. 3016 (August 14, 2008) H.R. 4040

- 1. This Certification of Compliance covers the playground components sold on Order #\_\_\_\_\_, identified as Proposal #\_\_\_\_\_.
- 2. This Certification of Compliance certifies that the products identified in item 1 comply with all rules, bans, standards or regulations applicable to the product under the Consumer Product Safety Improvement Act of 2008; Sections 101, 102, 103 and 108.
- 3. Manufacturer certifying compliance of the products:

BCI Burke Company, LLC 660 Van Dyne Road Fond du Lac, WI 54935 (920) 921-9220

4. The contact information for the individual maintaining records of the test results is as follows: Wayne Orvold

BCI Burke Company, LLC 660 Van Dyne Road Fond du lac, WI 54935 (920) 921-9220 Worvold@bciburke.com

- 5. These products were manufactured for shipment on \_\_\_\_\_.
- 6. This General Conformity Certification and certification of compliance is based on testing completed through a reasonable testing program (ISO WI 028-08) maintained at the manufacturer listed above.
- The testing for this certificate was completed at: Applied Technical Services, Incorporated 1049 Triad Coart Marietta, GA 30062 (770) 423-1400

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# SITE PLAN & FOOTING PLAN DRAWINGS ARE LOCATED IN THE BACK OF THE MANUAL ALONG WITH ORDER DOCUMENTATION.

## **INTRODUCTION**

## Congratulations on your purchase of Burke playground equipment!

A tremendous amount of care, quality and workmanship went into the design and manufacture of your equipment. Now is the time when your part of the teamwork really begins.

Following are a few topics vital to the maintenance of your playground and - most importantly - minimizing your problems in the field.

- All equipment <u>must</u> be installed per Burke Installation Guidelines and Specifications. Detailed prints and instructions are included in the back of this manual, arranged in numerical order by the component number which can be found on the site plan drawings which are at the very end of this manual.
- Don't forget to add a proper safety surface, as recommended by CPSC Guidelines for Public Playground Equipment and ASTM- F 1487 Standards or CSA/CAN Z614 Standards.
- It is critical to the long life of your equipment to establish a routine maintenance program. To help you, enclosed is a checklist including frequency for inspection based on recommendations of the CPSC Guidelines for Public Playground Equipment.

If your playground has been installed in atmospheric conditions of high salt content, i.e. near the ocean, the chance for corrosion is much more likely. Therefore, frequent checks are highly recommended.

Your equipment has arrived in great shape. **Protect your Warranty - equipment maintenance is up to you.** 

We are here to help you with any questions or concerns you may have about your equipment. Please feel free to call our Toll Free 1-800 number.

## Thank you for your business.

## **BCI Burke Company, LLC**

For questions, call us at: **1-800-356-2070** 

This installation manual is applicable to the following playground equipment: Nucleus®, Voltage®, Intensity®, NaturePlay®, Circuit Play®, Circuit Play Beginnings®, Little Buddies® and Burke Basics

## **SUPERVISION**

Playgrounds should be supervised at all times when children are using them. Supervisors and parents should use sound judgment in preventing overcrowding on equipment, or the use of play apparatus whose challenge exceeds the user's capabilities. Parents and adult supervisors should instruct children on the safe use of playground equipment. Intensive classroom and home instruction about safe behavior on playground equipment make an important contribution to playground safety.

For references and details on safety recommendations, we suggest you add the following publications to your library.

- Consumer Product Safety Commission (CPSC) <u>A Handbook for Public Playground</u> <u>Safety</u> (Publication No. 325)
   Standard consumer safety performance specification for playground equipment for public use.
- American Society for Testing and Materials (ASTM) F1487 -Standard consumer safety performance specification for playground equipment for public use.
- American Society for Testing and Materials (ASTM) F1292 -Standard specification for impact attenuation of surface systems under and around playground equipment.
- Canadian Standards Association (CAN/CSA) Z614 -<u>Children's Playspaces and Equipment</u> A National Standard of Canada

To obtain the above publications you may contact the following:

US Consumer Product Safety Commission Washington, D.C. 20207 1-800-638-2772 http://www.cpsc.gov Canadian Standards Association 5060 Spectrum Way, Suite 100 Mississauga, Ontario, Canada L4W 5N6 <u>http://www.csa.ca</u> (800) 463-6727

American Society for Testing and Materials 100 Barr Harbor Dr. West Conshohocken, PA 19428 http://www.astm.org (610) 832-9585 Fax: (610) 832-9555

## NOTE:

For equipment and components that are certified and compliant with the Canadian Standard, CAN/CSA Z614, BCI Burke Company, LLC has performed the necessary Structural Integrity tests required and can ensure compliance with the requirements of Clause 9.

BCI Burke Company, LLC

# **PRE-INSTALLATION GUIDELINES**

Instructions are clearly presented and simple to read. Each step in the process is concisely explained. There are no secrets to completing a successful BCI Burke play structure package. Carefully read the instructions and familiarize yourself with the assembly procedures. Continually keep in mind that proper planning saves time and money. When your unit is finally assembled, place your instruction sheets in a safe, but easily accessible, file for future referral. Do not deviate or take shortcuts in the assembly procedures.

BCI Burke builds durable, long-lasting equipment. You, however, are responsible for the proper installation and maintenance of the equipment. Always follow the equipment installation drawings provided and DO NOT deviate from the specifications or fabrication.

Several steps are of the UTMOST IMPORTANCE before beginning assembly:

- 1. Read instructions carefully and familiarize yourself with the site plan drawings in the very back of this manual, and the accompanying component installation instructions, arranged in numerical order also in the back of this manual.
- 2. Make sure to plan to orientate and place structures so that slides are not in direct sunlight during play times, as slide surfaces tend to get hot.
- 3. Clear and level an area large enough for your unit and the recommended minimum use and noencroachment zones. A use zone is an area beneath and around the equipment, which we have identified on the plan drawing, which can be found in the back of this manual. This zone under and around your equipment must be free and clear of any obstruction. Overhead obstructions within the use zones of playground equipment that are not part of the play structure (for example tree limbs) shall be at least 84" above each designated play surface or 84" above the pivot point of the swings. All overhead utility line clearances above the use zone areas shall comply with all local, state, and national codes (ex: National Electrical Safety Code).
- 4. Have the proper tools available for installation. You will need an auger for digging footing holes, hammer, rubber mallet, 3/16", 1/4", 5/16", 7/16" and 3/4" drill bits, an accurate level, tape measure along with a standard set of wrenches, and a non-permanent felt-tip pen for marking clamp locations. A tool for completely closing S-Hooks is also necessary.
- 5. The equipment will arrive via truck and will be packed on long pallets, up to 14' long. You will need to plan for a way to remove the pallets from the truck, either with a fork lift with extended forks, or a large group of people to unload from the pallet on the truck by hand.
- 6. The use of a transit is recommended for accurate footing and platform heights. Plot the dimensions of your layout accurately with all 5" OD (Nucleus, Intensity) support posts at 48" centers, all 3-1/2" OD (Voltage) platform support posts at 44" centers and all 2-3/8" OD (Little Buddies) platform support posts at 40" centers. Footing hole locations for other components can be done at a later time during installation.

# **GENERAL INSTALLATION GUIDELINES**

- 1. Identify each component of your equipment before starting installation. The Site Plan drawings in the very back of this manual identify each component by number and also identify each of the upright support posts with a letter and number designation.
- 2. The letter and number designation for the upright posts can also be found on the packaging of each post. See Figure 1 for reference below.



# Figure 1

- 3. The Installation Instructions are located in the back of this manual, arranged in numerical order by the component number. The component number can be found on the site plan and on the list of components in the order documentation.
- 4. The platform heights, which are shown as a number in a circle on the platform on the Site Plan Drawings, are measured from the finished grade of the resilient surfacing material to the top of the platforms. They are shown in inches.
- 5. Footing hole depths may vary depending on the depth of the resilient material to be installed along with local soil and weather conditions. See Typical Concrete Footings in Figures 2 7 (located on pages 11 13). Use masonry bricks, gravel, or shims at the bottom of the footing holes in order to block up and plumb the posts and the platforms to the correct level. Be sure to use red plastic caps provided on ends of posts to keep posts from sinking in support material.
- 6. Assemble the main structure referring to the site plan and installation drawings for correct post and platform orientation. Make sure to attach and use connecting pieces (e.g. bridges, horizontal ladders, stairs and stair barriers, rigid tubes, etc.) to ensure the correct distances to adjacent main structure units, platforms or supports. It is very difficult to adjust post spacing once they are set in concrete.

# **GENERAL INSTALLATION GUIDELINES**

7. After each connecting section is attached, be sure to plumb and level each component and tighten all bolts, nuts and set screws. After tightening all bolts, nuts and set screws, make sure to check any exposed bolt ends to make sure they do not protrude beyond the face of the nut more than 2 threads as required in ASTM F1487 section 6.4.3.



**Figure 1: Thread Protrusion** 

If there are more than 2 threads protruding beyond the face of the nut, check for correct hardware and assembly first. If hardware and assembly are correct, there are several ways to remedy the exposed threads. You could use a shorter bolt, put extra washers behind the nut or cut the bolt removing the extra threads. If you cut the bolt, make sure to grind the ends so that they are free of burrs and sharp edges. If there are opposing bolts, such as on swing hangers, you can loosen one nut and tighten the other to even the protruding threads out

- 8. Once the central unit is in place, brace posts in vertical position until footings have been poured, recheck level and tighten all bolts, nuts and set screws. See corresponding installation drawings.
- 9. Attach safety enclosures (e.g. pipe walls, panels) on all platforms where other play components are not used. Tighten all bolts, nuts and set screws.
- 10. Attach other components (e.g. slides, arch ladders, cargo nets, etc.) next, according to their respective installation instruction drawings. Tighten all bolts, nuts and set screws.
- 11. Pour concrete footings. MAKE SURE UNIT IS PLUMB AND LEVEL BEFORE POURING CONCRETE FOOTINGS. See Typical Concrete Footings in Figure 2 through Figure 5 (Located on Page 7 through Page 9). After concrete footings have been poured and the concrete has set, backfill holes with dirt to reduce the potential of any concrete footing ever protruding above the resilient surfacing material
- 12. Clamp and Bracket Installation Guidelines:

#### Nucleus/Voltage/Intensity

Drill holes to pin or rivet mount brackets per instructions in installation drawings. This is VERY IMPORTANT. This will ensure that the components will not slide, slip, or rotate on the brackets. **NOTE:** In coastal areas, a clear silicone caulk (provided in installation kit with purchase of Burke Coastal Package) can be utilized to help seal the drilled holes prior to inserting rivets into the mount brackets. See typical mount bracket assembly drawings located in the installation instructions section.

# **GENERAL INSTALLATION GUIDELINES**

- 13. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines. See Resilient Surfacing Material, Figures 6 8, and Table 1 (located on pages 10 12).
- 14. Attach swings, rings, and tire swings after resilient surfacing material is in place. Completely close all "S" hooks. See ASTM Requirements for Fastening Devices in Figures 9 12 (located on page 13).
- 15. Attach Warning and Manufacturer labels. See Warning and Manufacturer Labels for instructions and Figures 13 14 (located on pages 14 15).
- 16. After installation is complete, inspect the entire unit. Make sure all fastening hardware and setscrews are tight, and all drive pins and rivets have been installed. Make sure all "S" hooks are completely closed. Check all coated parts to ensure coating is covering all metal; if not, follow repair instructions listed in the Maintenance section.
- 17. Most of our fasteners are precoated with a Loctite patch. As noted previously, fasteners should only be started for initial assembly so that the Loctite is not activated. Once you are going to tighten the hardware, use this list for standard fastener torque specs. Note: it may be necessary to tighten a bolt more than standard torques in order to have the assembly draw two parts together. We do not recommend the use of impact wrenches for the assembly of any playground components as they can damage the hardware, nutsert and component part.

1/4"-20	100 in-lb
5/16"-18	140 in-lb
3/8"-16	250 in-lb
7/16"-20	400 in-lb



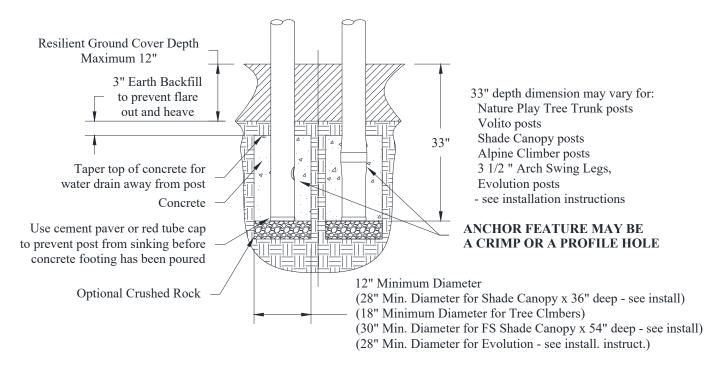
**NO IMPACT WRENCHES** 

Also note that fastener torque should not be tested after the Loctite has been activated or set up. It would take a much greater torque to break the screw loose, and that may cause the Loctite to not hold the screw tight.

18. We strongly recommend complete inspections for new structures occur within three (3) days after installation, within seven (7) days after installation and on a regularly scheduled basis thereafter. Playgrounds with heavy use should be inspected daily. For your convenience there is an Inspection Checklist (located on page 16).

# **TYPICAL CONCRETE FOOTINGS**

Burke specifies concrete in-ground footings, surface mount, and surface mount pier footings to provide the foundation for the playground structure. The details provided on this page recommend minimum footing requirements. This page is what you will reference when installation prints require you to see a typical footing detail. The following details are to be used on all Burke products unless specific dimensions are given on a particular component installation sheet.



**Figure 2: Support Post Footing Detail** 

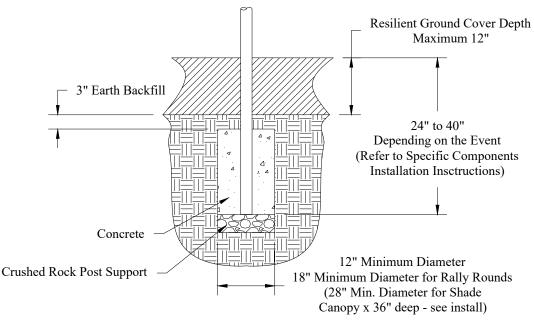
Support Post Footing Detail is used for the following:

- 5" OD TUBING
- 3 1/2" OD TUBING
- ALL SQUARE TUBING
- See Installation Instructions to determine depth of posts for SHADEPLAY CANOPIES and EVOLUTION tower structures.

## **Special Considerations:**

- 1. Consult your local building codes to assure proper depth of footings. The required diameter and depth of the concrete can vary depending on soil conditions and temperature extremes.
- 2. In cold weather climates the concrete should be deep enough to reach below the frost line, especially the main support posts.
- 3. In sandy or loose soil conditions the diameter of the footing should be doubled to provide a stable support structure.
- 4. Use masonry bricks, gravel, or shims at the bottom of the footing holes in order to block up and plumb the posts and the platforms to the correct level.

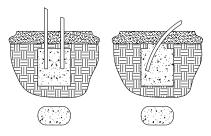
# **TYPICAL CONCRETE FOOTINGS**



**Figure 3: Play Event Footing Detail** 

The Play Event Footing Detail is used for the following:

- All tubing 2 3/8" OD and smaller
- All Playground Structure Play events
- 12' x 12' and 15' x 15' ShadePlay Canopy Posts (36" MIN DEPTH)
- 15' x 19' and HEX ShadePlay Canopy Posts (36" MIN DEPTH)



#### Figure 4: Optional Play Event Footing

Some play events have 2 supports close together or a single support that enters the ground at an angle. A trench like hole can be excavated to cover both situations as shown above. The starting size of the trench should adhere to the dimensions listed on the play event footing detail.

#### **Special Considerations:**

- 1. Consult your local building codes to assure proper depth of footings. The required diameter and depth of the concrete can vary depending on soil conditions and temperature extremes.
- 2. In cold weather climates the concrete should be deep enough to reach below the frost line, especially the main support posts.
- 3. In sandy or loose soil conditions the diameter of the footing should be doubled to provide a stable support structure.

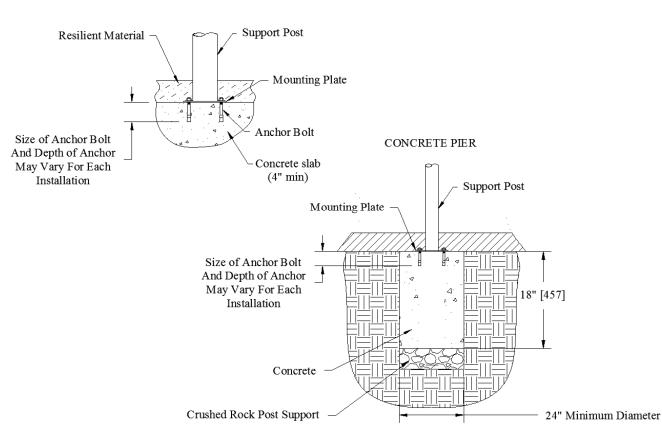
#### BCI Burke Company, LLC

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# **TYPICAL CONCRETE FOOTINGS**

When installing a surface mounted structure or event as seen in Figure 5, there may be multiple mounting plate styles depending on the type of supports involved. A hole is to be drilled and an anchor installed for each hole or slot in all mounting plates. Surface mounted events and structures are to be installed to concrete surfaces only. Concrete is to be a minimum of 4 inches in thickness and have a minimum strength rating of 3000psi for structures without shade canopies; 4000psi with shade canopies.

Burke recommends 1/2" diameter anchors, with the length based on the thickness of the concrete slab, the type of anchors and the recommendation of the anchor manufacturer. The pullout strength of each anchor should be a minimum of 2600 pounds. If there is a shade canopy on the structure, surface mounting must be approved by the factory first, and anchors used must be an epoxy based anchor with a minimum pullout strength of 4000 pounds.



CONCRETE SLAB

**Figure 5: Surface Mount Detail** 

#### **Special Considerations:**

- 1. Consult your local building codes to ensure the use of the proper anchor bolt size.
- 2. Concrete must have the proper amount of curing time to ensure that anchors have maximum holding power.
- 3. Existing concrete is to be free of cracks and heaving in areas where anchor bolts are to be installed.

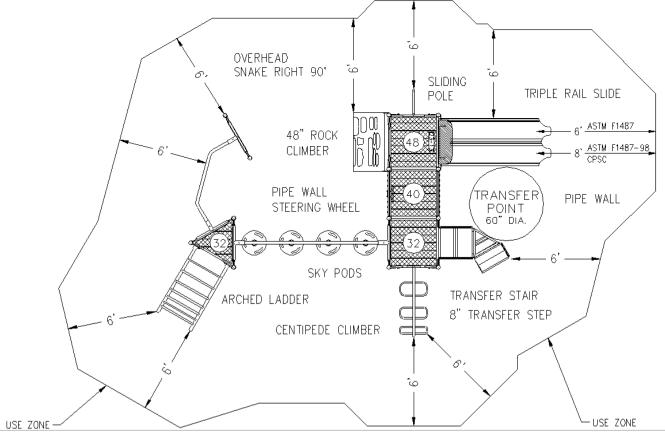
#### BCI Burke Company, LLC

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# **RESILIENT SURFACING MATERIAL**

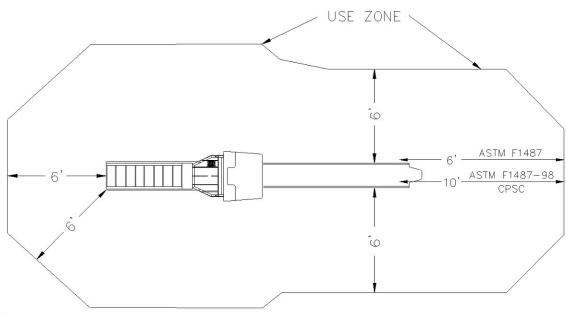
As the owner of a playground, you are responsible for understanding the recommendations for surfacing and providing and maintaining an appropriate impact attenuating surface material under and around all playground equipment.

Since the majority of playground injuries result from falls, use only a soft, resilient surface under and around play equipment. Never place play equipment on hard surfaces, such as concrete or asphalt. Grass surfaces are not recommended; compacted earth will not cushion falls. Shock-absorbing surfaces should meet the U.S. Consumer Product Safety Commission (CPSC) recommendations as detailed in *A Handbook for Public Playground Safety*. (Revision dated 1997, Publication No. 325, pages 3 through 6 and Appendix C pages 38 through 40), ASTM F1292: Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment and ASTM F1487: Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use. For installations in Canada, shock-absorbing surfaces should also meet the requirements of CAN/CSA Z614 Clause 10. Use the soft, resilient surface in the use zone or protective surfacing zone, which we have identified on the Site Plan Drawing. (Sample in Figure 6 below.) There are also additional space requirements called no-encroachment zones around moving equipment and slides, as required in CAN/CSA Z614. (Typically extending an additional 1.8 m beyond the protective surfacing zone. These are not shown on the plan drawings.)



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## Figure 6: Sample Site Plan Drawing RESILIENT SURFACING MATERIAL



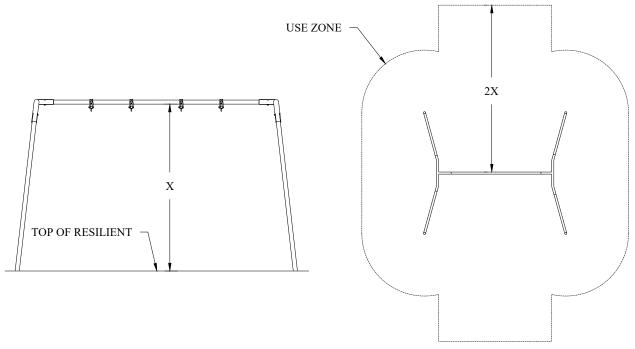
**Figure 7: Use Zone for Slides** 

The selection of the resilient surface should be based on the fall potential from the highest platforms as well as the height of the average user. For stationary components and slides it should extend a minimum of 6 feet in all directions as shown in Figure 7.

To the front and to the rear of to-fro swings, the use zone should extend a "minimum distance of 2X on a line extending 90° both front and rear from the longitudinal direction of the suspending beam, where X equals the vertical distance from the top of the protective surfacing to the pivot point of the swing" and the use zone for a rotating tire swing "shall be a minimum horizontal distance of Y + 72 in. (1830 mm) in all directions from pivot point of the swing, where Y equals the vertical distance between the pivot point and the top of the swing seat or suspended member." (ASTM F 1487 Pg. 13-14. A minimum horizontal distance of 2Y is required in Canada for rotating tire swings). See Figure 8 (Located on Page 12).

In addition to the use zone required in ASTM and CPSC, a no-encroachment zone may also be provided. This is an area in which the children run and play around the equipment. To prevent traffic conflicts, the no-encroachment zone should be free of any other equipment, trees, fencing, curbing, or other hazardous objects and should extend beyond the soft resilient surfacing a minimum of 6 feet. (No-encroachment zones for to-fro and tire swings are required in Canada).

# **RESILIENT SURFACING MATERIAL**



**Figure 8: Use Zones for To-Fro Swings** 

An impact attenuating surfacing material is required under and around all equipment. The Playground Surfacing Technical Information Guide published by the U. S. Consumer Product Safety Commission contains the results of tests performed to determine the relative shock-absorbing properties of seven loose-fill materials commonly used resilient surfacing. The report contains a table of Critical Heights, the height below which a life-threatening head injury would not be expected to occur, for each of the loose-fill surface materials tested. This information is available through the Consumer Product Safety Commission and is shown below in Table 1.

<b>Type of Loose-Fill Material</b>	e of Loose-Fill Material Compressed Depth of						
	Loose-fill material						
Wood Chips	9 inches	10 ft.					
Wood Mulch (non-CCA)	9 inches	7 ft.					
Shredded/recycled rubber	9 inches	10 ft.					
Pea Gravel	9 inches	5 ft.					
Sand	9 inches	4 ft.					

<b>Table 1: CPSC Critical Fall Heights</b>	(taken from	pub. 325, p	bage 10)
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Manufactured surfaces, such as rubber matting materials, may also be suitable for use under and around playground equipment. Manufacturers of these surface materials should be contacted for specific information on the shock-absorbing performance and cost of their individual products.

## **ASTM REQUIREMENTS FOR FASTENING DEVICES**

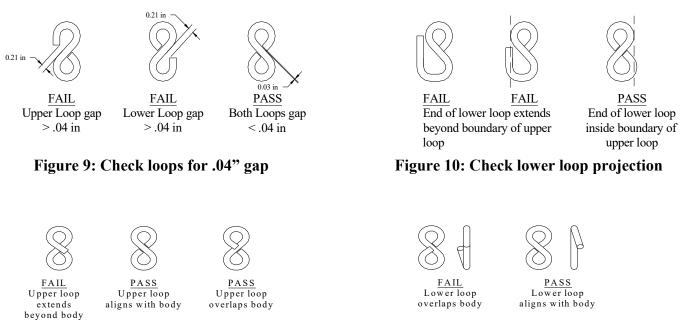




Figure 12: Check lower loop alignment

## **UPRIGHT POST NAMING SCHEME**

**0: STEEL IN GROUND 5: ALUMINUM IN GROUND** 8 STEEL SM 9 ALUMINUM SM XX: LENGTH X: MULTIPLES 1 - 72 S3 - 0 \*072 IS NEW 3XX: 3 ½" OD S: SWAGED PREFIX FOR 5XX: 5" OD C: CAPPED ALL POSTS R: ROOF **B: STUBBY- TOP STACK** T: TOP - ALUM ONLY

Figure 13: Upright Post Naming Scheme

## The following is the <u>Owner's</u> responsibility. Please read it carefully.

Labels, as required by ASTM F 1487, CAN/CSA Z614, CPSIA and California law, have been included with this playground equipment and must be applied after installation is complete.

## Instructions

- Choose highly visible label locations at a height of 4' to 5' above the resilient surfacing material. See Figure 13.
- The preferable location would be out of direct sunlight.
- Posts are the best location for labels. Do not place on PVC coated items or areas of high wear.
- Surface must be clean and dry prior to applying labels.
- Replacement labels are available upon request should a label become destroyed, mutilated or vandalized. Contact Burke Customer Service at 1-800-356-2070.



Age-appropriate Safety Labels with Manufacturer's Identification – You will receive labels with your equipment that designate the age appropriateness based on the specific components in your design. (Note: Three labels not shown here are those for 6-23 month olds, 4-5 year olds and 4-12 year olds. Age appropriateness is determined by ASTM requirements and CPSC recommendations.) Apply one label adjacent to or visible from the primary entrance to a structure and one label visible from another entrance on the opposite side of the structure. There should be a minimum of two labels on each play structure. Larger structures may have additional labels included. These labels should be placed near other entrances on opposite sides of the structure.

Burk	(e	BCI Burke Company, LLC Fond du Lac, WI USA 1-800-356-2070 www.bciburke.com
Order:	12	345
Structure	: 99	-99999-1
Date:	10	28/2016
Equipment identification	label for ent	ire play area unless otherwise labeled.

#### AWARNING

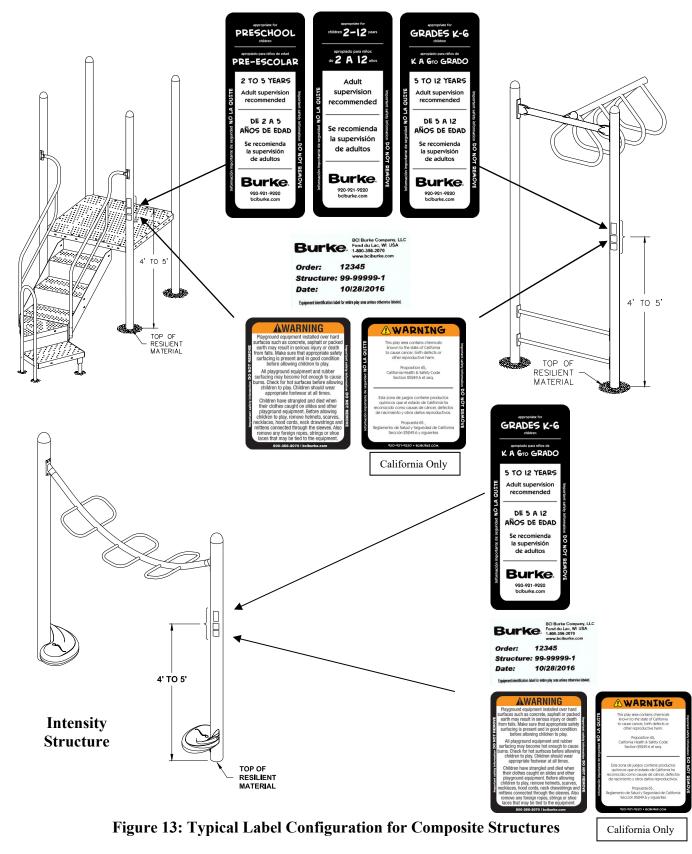
Playground equipment installed over hard surfaces such as concrete, asphalt or packed earth may result in serious linury or death from falls. Make sure that appropriate safety surfacing is present and in good condition before allowing children to play. All playground equipment and rubber surfacing may become hot enough to cause purch, check for hot surfaces before allowing children to play. Children should wear appropriate footwear at all times. Children have strangled and died when their clothes caught to nsides and other playground equipment. Before allowing children to play, remove helmets, scarves, necklaces, hood cords, neck drawstrings and mittens connected through the sleves. Also remove any foreign ropes, strings or shoe laces that may be tied to the equipment. **Equipment Identification Label and cover label -** Place this label and clear protective cover label on all equipment, either directly below the Age-appropriate designation or as the top most label for equipment that does not have a specific age-appropriate label. See Figures 13, 14 and 15. This label provides the tracking label information required by CPSIA.



Warning Labels - Place one directly underneath each of the Age-appropriate Safety Labels and/or Manufacturer's Identification Label. If you have additional labels they should be placed near other entrances on opposite sides of the structure.
Warning Labels are a Requirement in the ASTM F1487
Standard and they should serve as a constant reminder of the potential hazards associated with using the play equipment.
California Prop 65 Warning Label – Required in California only.

BCI Burke Company, LLC

# WARNING AND MANUFACTURER LABELS



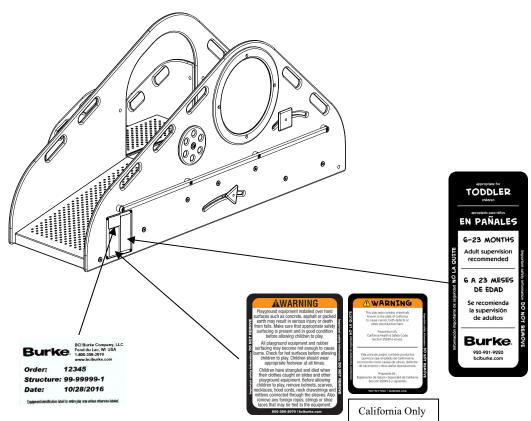


Figure 14: Typical Label Configuration for Composite Structures

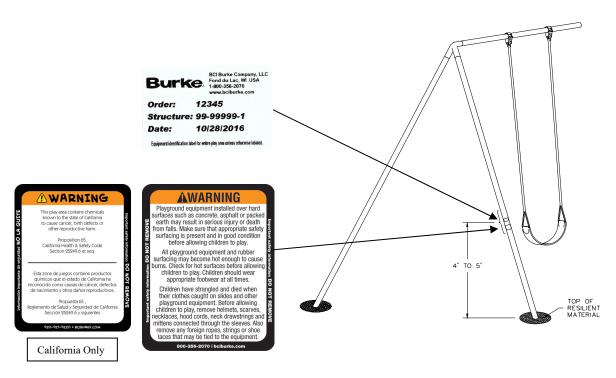


Figure 15: Typical Label Configuration for Non-Age Specific Equipment

# **INSPECTION CHECKLIST**

Review all Playground Installation Guidelines, particularly checking for specified dimensions. Make sure actual installation dimensions agree with the ones in the instructions.	Check height of all upper body equipment, such as horizontal ladders. The height of these components should agree with dimensions as specified in Playground Installation Guidelines when measured from top of the resilient surfacing material.
Double check deck heights. The height of the deck or platform is measured from the top of the resilient surfacing material to the top of the platform.	Touch up any scratches or installation damage to powder coated finish with color-matched spray paint supplied with the equipment.
Clean dried concrete off support posts and any other affected components	Touch up any exposed metal on coated parts following the instructions in the Maintenance section.
Review entire structure to insure that there are no completely bounded openings greater than 3 1/2" and less than 9". Completely bounded openings are openings that are enclosed on all sides.	Check ropes of rope climbers for any installation damage such as cuts that may expose the steel reinforcement strands.
Insure all post ends have properly installed post caps. Insure the drive rivets are secure.	Insure proper use zone has been allowed for equipment. See Site Plan Drawing included in this manual to check dimensions of required zone.
Insure all fasteners are tightened according to specifications listed on your installation instructions.	Dispose of all packaging material properly. Recycle appropriate materials and keep items like plastic bags out of reach or contact of small children.
Insure all "S" hooks are completely closed. An "S" hook is considered closed when there is no gap or space greater than .04" when measured with a feeler gauge, or the thickness of a dime.	Insure all support post connections are permanently secured. Insure all drive rivets and/or spring pins have been installed. Review installation instructions for specific locations.
Inspected by:	Inspection Date:
	BCI Burke Company, LLC For questions, call us at:

1-800-356-2070

Poorly Maintained playground equipment and surface areas can contribute to serious injury. Develop a comprehensive maintenance program, which should include staff training, use of inspection checklists, prompt repair of discovered problems and detailed documentation. To obtain more information, contact the U. S. Consumer Product Safety Commission (CPSC), Washington, D. C. 20207 (1-800-638-2772) and request "A Handbook for Public Playground Safety" Revised 1997.

### **INSPECTIONS:**

It is critical to maintaining the long life of your equipment and preventing injuries, to establish a routine maintenance program.

Once your Burke equipment has been installed and your Final Inspection Check completed, we recommend a complete inspection within seven (7) days after installation and on a regularly scheduled basis thereafter. *Playgrounds with heavy use or in coastal areas should be inspected daily.* 

As a guideline, please see the **Frequency of General Maintenance** and **General Maintenance Checklist**, which provide charts with recommended frequency for inspections as well as suggested inspection areas of your play equipment.

#### Surfacing:

If you have loose surfacing materials, such as sand or wood chips, check for specified depth throughout the playground. Add new material as required.

If your safety surfacing is poured-in-place or a matting or tile, check for wear or damage.

# If your playground is installed in atmospheric conditions of high salt content, i.e. near the ocean, the chance for corrosion is much more likely. Therefore, frequent checks are highly recommended.

#### **Instructions for Inspection Checklist:**

- 1. Determine what is to be inspected and how frequently.
- 2. Establish a regular pattern of inspection.
- 3. File Inspection Report with your permanent records.
- 4. If a replacement part is needed, contact your local representative.
- 5. If repairs are needed, list action taken and date to be filed in your permanent records.

## (Check Material Safety Data Sheet before starting to ensure safety.)

## **PVC Coating Repair Instructions:**

- 1. Segregate the area of the equipment (by yellow tape, fencing, etc.) from children, where the repair is located.
- 2. Clean the area in need of repair.
  - a. Remove any coating that is loose; trim coating with a knife if necessary.
  - b. If there is any rust, remove and clean thoroughly.
- 3. Once clean, take container of repair material and open the spout and squeeze out the material into the cleaned area in need of repair.
  - a. Do not open container of repair material until ready to use.
  - b. As soon as you finish using the container with repair material, close it tightly immediately so it does not dry out.
- 4. Take a putty knife or similar tool to spread the material evenly. It should be at the same level thickness as the original coating when complete.
- 5. Let dry for about 15 minutes and recheck. As the material dries, it shrinks so you may need to add material repeating the same steps (3-4) mentioned above.
- 6. Once fully dry (1 full day to ensure proper cure), remove yellow tape, etc. that segregated the children from the area repaired. The children may be allowed to play again.

## **Touch-up Painting Instructions:**

- 1. Segregate the area of the equipment (by yellow tape, fencing, etc.) from children, where the repair is located.
- 2. Clean area to be touched up by removing any loose paint or dirt particles and removing any rust with a light grit sand paper. Wipe area with clean cloth.
- 3. For best results, primer and touch up paint should be at room temperature. Avoid high heat and high humidity when applying the touch up paint. Shake can thoroughly to allow mixing ball to properly mix contents of the can.
- 4. For structures in coastal areas: Apply primer in *light* coats until area is covered. Allow primer to dry for 30 minutes (Primer is supplied with purchase of Burke Coastal Package).
- 5. For structures in coastal areas: Apply touch up paint in several light coats to cover the primed areas. Avoid drips and runs of the touch up paint for the best finish. Let dry for a minimum of 6 hours before use.

## **Graffiti Remover:**

For proper use and best results of the Graffiti Remover that is supplied with each Burke Play Structure to remove unwanted marks or vandalism, please follow this procedure: **For Plastic, PVC coated, rubber or GFRC and rock holds:** 

- Lightly spray the affected area and wipe off with a dry cloth/towel. For stubborn marks, spray
  affected area and let sit for 15 seconds and then wipe off and dry with a cloth/towel.
  For Steel/Powder coated parts:
- 1. Spray a dry cloth/towel with the graffiti remover to get a small area of it wet. Wipe the area to be cleaned with that dampened cloth. Repeat if unwanted marks are still evident. Do not spray the Steel/Powder coated part directly or let the Graffiti Remover sit on the powder coated part for an extended period of time, as it could affect the finish/shine of the powder coat. Do not spray Graffiti Remover on bearings or other areas that require or hold grease.

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# **ShadePlay Canopy Instructions**

To clean shade canopy fabric use plain water to hose down the fabric and remove any debris. **DO NOT** use any type of detergent. Contact with organic solvents, halogens or highly acidic substances may reduce the service life of the fabric and void the warranty.

# CAUTION: The ShadePlay canopy must be removed from the play structure before inclement weather, severe wind storms or winter (snow) weather to prevent damage to the shade fabric or play structure.

To remove and later re-install the ShadePlay canopy, the quick release fastening mechanism will facilitate easy removal and re-installation.

To remove the ShadePlay canopy:

- 1. Remove end cap from end of tensioning rafter. See Figure 16.
- 2. Remove lower 3/8" x 2" button head cap screw and 3/8" locknut at the pivot joint that secures the tensioning arm in the closed position. See Figure 16.
- 3. DO NOT TRY TO REMOVE PIVOT PIN. It is locked into position with a set-screw located on the top side of the rafter.
- 4. Carefully push up tensioning arm into the 'Open Position'. See Figure 17.

## WARNING: BE EXTREMELY CAREFUL WHEN PIVOTING TENSIONING ARM INTO OPEN OR CLOSED POSITION. TENSIONING ARM COULD SPRING UP DUE TO THE TENSION BEING APPLIED BY CANOPY CABLE SYSTEM AND COULD RESULT IN INJURY. KEEP HANDS AND FINGERS OUT FROM BETWEEN CANOPY AND ARM AND OUT OF PIVOT JOINT AREA.

- 5. Unhook shade canopy fabric, cable end(s) and/or turnbuckle from hook.
- 6. Carefully pull down tensioning arm into 'Closed Position' and install removed hardware securing end cap and tensioning arm in closed position.
- 7. Repeat steps 1 thru 6 as necessary for all tensioning rafters.
- 8. Fold or roll up ShadePlay canopy and store in dry safe location until ready to re-install.

To re-install the ShadePlay canopy:

- 1. Remove end cap from end of all rafters.
- 2. Remove lower 3/8" x 2" button head cap screw and 3/8" locknut at all the pivot joints that secure the tensioning arms in the closed position. See Figure 16.
- 3. Look to make sure pivot pin is in the pivot joint of all tensioning arms. See Figure 17.
- 4. Lay ShadePlay canopy over rafters and orientate it so that each tensioning arm has a canopy corner. See Figure 18.
- 5. Attach canopy to all rafters, with tensioning arms in open position attach the canopy corner, cable end and turnbuckle end onto hook.
- Continue to tighten canopy by carefully pulling tensioning arms down into 'Closed Position'. If canopy is too tight to pull arm down, loosen turnbuckle tension a small amount. See Figure 18.

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## WARNING: BE EXTREMELY CAREFUL WHEN PIVOTING TENSIONING ARM INTO OPEN OR CLOSED POSITION. TENSIONING ARM COULD SPRING UP DUE TO THE TENSION BEING APPLIED BY CANOPY CABLE SYSTEM AND COULD RESULT IN INJURY. KEEP HANDS AND FINGERS OUT FROM BETWEEN CANOPY AND ARM AND OUT OF PIVOT JOINT AREA.

- 7. After all tensioning arms are in 'Closed Position' look around canopy for major wrinkles in fabric. The majority of wrinkles can be removed by moving the tensioning arms back into the 'Open Position' and tightening each turnbuckle a small amount. Repeat this process, tightening the turnbuckles only a small amount each time until the major wrinkles are eliminated. Minor wrinkles will disappear with time in the environment and in the stretched state. Tighten all turnbuckles evenly to spread tension. See Figure 18.
- 8. When tightening canopy is complete, secure tensioning arms with 3/8" x 2" button head cap screws and 3/8" locknuts. Tighten all hardware on pivot joint. See Figure 16.
- 9. Install end caps to all rafter ends using 3/8" x 3/4" SS button head cap screw (without locking thread) and 3/8" SS flat washer. See Figure 16.

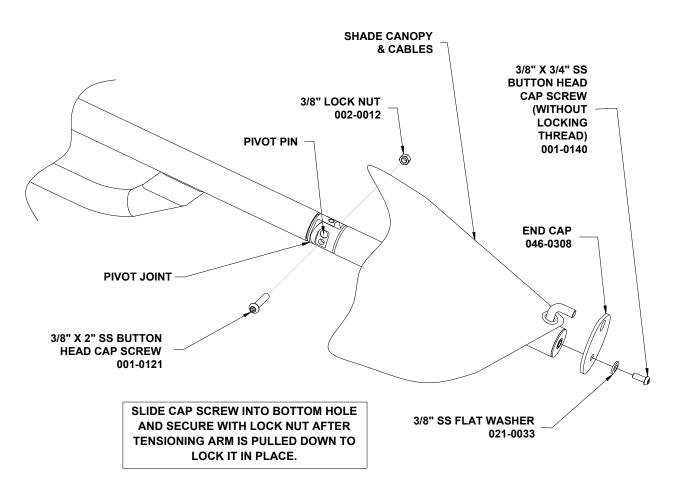


Figure 16: Tensioning Arm in 'Closed Position'

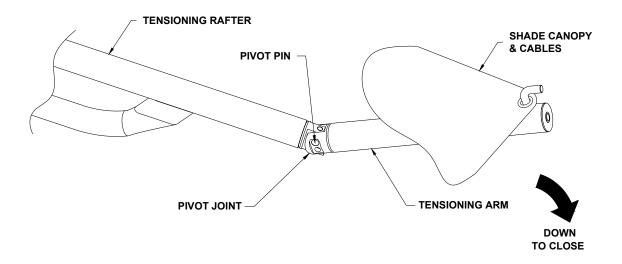
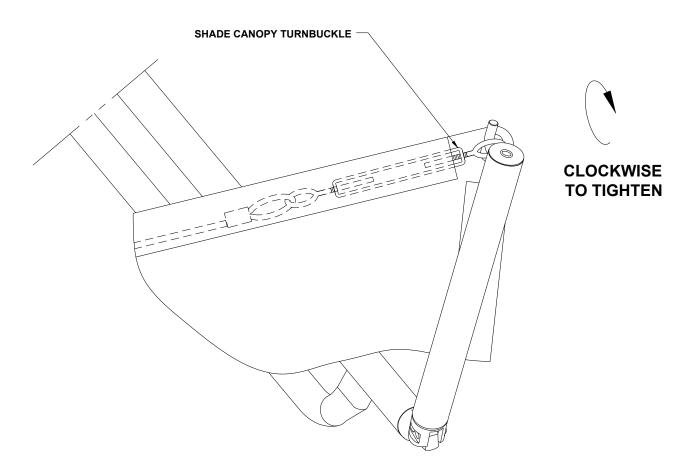
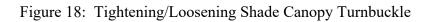


Figure 17: Tensioning Arm in 'Open Position'





# MAINTENANCE EZ Tension ShadePlay Canopy Instructions

To clean shade canopy fabric use plain water to hose down the fabric and remove any debris. **DO NOT** use any type of detergent. Contact with organic solvents, halogens or highly acidic substances may reduce the service life of the fabric and void the warranty.

# CAUTION: The EZ Tension ShadePlay canopy must be removed from the play structure before inclement weather, severe wind storms or winter (snow) weather to prevent damage to the shade fabric or play structure.

To remove and later re-install the EZ Tension ShadePlay canopy, the quick release fastening mechanism will facilitate easy removal and re-installation.

To remove the ShadePlay canopy:

- 1. Remove end caps from end of all tensioning rafters. See Figure 19.
- 2. Locate tension arms with 15/16" bolt head located at the end. Using a 15/16 socket rotate bolt head counter-clockwise to slide the holding pin upwards releasing the tension of the canopy.

## WARNING: DO NOT USE ANY POWER TOOLS TO ROTATE THIS BOLT.

- 3. Remove lower 3/8" x 2" button head cap screw and 3/8" locknut at the pivot joint that secures the tensioning arm in the closed position. See Figure 19.
- 4. DO NOT TRY TO REMOVE PIVOT PIN. It is locked into position with a set-screw located on the top side of the rafter.
- 5. Carefully push up tensioning arm into the 'Open Position'. See Figure 20.

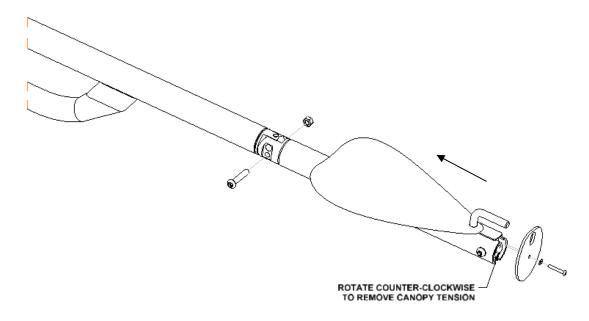


Figure 19: EZ Tension Arm in Closed Position

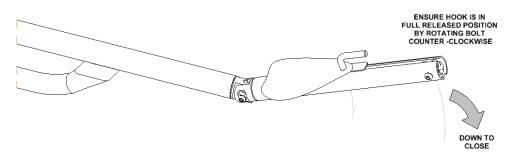


Figure 20: EZ Tension Arm in Open Position

## WARNING: BE EXTREMELY CAREFUL WHEN PIVOTING TENSIONING ARM INTO OPEN OR CLOSED POSITION. TENSIONING ARM COULD SPRING UP DUE TO THE TENSION BEING APPLIED BY CANOPY CABLE SYSTEM AND COULD RESULT IN INJURY. KEEP HANDS AND FINGERS OUT FROM BETWEEN CANOPY AND ARM AND OUT OF PIVOT JOINT AREA.

- 6. Unhook shade canopy fabric, cable end(s) and/or turnbuckle from hook.
- 7. Carefully pull-down tensioning arm into 'Closed Position'
- 8. Rotate bolt clockwise to move the holding pin back to the end in the closed position.

## WARNING: DO NOT USE ANY POWER TOOLS TO ROTATE THIS BOLT.

- 9. Install removed hardware securing end cap and tension arm in closed position.
- 10. Repeat steps 1 thru 6 as necessary for all tensioning rafters.
- 11. Fold or roll up EZ Tension ShadePlay canopy and store in dry safe location until ready to reinstall.

To re-install the ShadePlay canopy:

- 1. Remove end caps from ends of all rafters.
- 2. With tension arms in open position, attach canopy corners to the hooks located at the end of the tensioning arms shown in Figure 20. Ensure the hooks are in the fully released position before attaching canopy by rotating the bolt counter-clockwise.
- 3. Begin tightening the shade canopy by pulling all of the tension arms into the closed position shown in Figure 19. When arms are in closed position, insert hardware to lock arms in place.
- 4. Using a 15/16" socket, turn the bolt head located in the end of the mechanisms until the hook holding the canopy is flush with the end of the tube. Clockwise rotation will apply tension to the canopy and counter-clockwise rotation will release the tension of the canopy.

## WARNING: DO NOT USE ANY POWER TOOLS TO TURN BOLT THIS MUST BE DONE WITH A SOCKET WRENCH

- 5. Look around at the shade canopy for small wrinkles in the fabric. Wrinkles can be removed by removing the tension in the canopy by turning the bolt counter-clockwise and moving the tension arms back into the open position and tightening the turnbuckles a small amount (1/4 1/2 inch).
- 6. Install end caps to ends of rafters.

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## **Sensory Panel Maintenance and Troubleshooting**

#### **Care and Maintenance**

Please refer to the installation instructions for details on battery installation. Apart from replacing the batteries from time to time, the unit is virtually maintenance free and has no other user-serviceable parts. Any attempt to tamper with the unit in any way other than advised in this guide will void the unit warranty.

### Cleaning

DO NOT use any chemicals or abrasive cleaners on the electronics control housing, sensors or speaker grill. Use a household hand pump water sprayer (the type you would water small household plants with) with a solution of water and a mild household detergent (the type you would use to clean your dishes) and gently spray the unit and wipe off with a soft damp cloth. DO NOT use a pressure washer or high powered hose to clean the unit.

#### **Speaker Grill**

Keep the speaker grill clean and clear of dirt and obstructions. The speaker itself is a marine grade external speaker and it will not get damaged by cleaning with water. DO NOT attempt to push anything through the speaker grill to clear any obstructions as this may damage the speaker membrane and/or reduce the water-resistance of the whole unit.

Fault	Solution
Low or decreased volume	• Ensure that the speaker grill is clear from obstruction. Volume is set at 75% during manufacture. If more volume is required, please seek advice from the manufacturer. Tampering with the electronic circuitry will void the warranty.
Not all the sensors are activating the sound replay	• Check that the speaker and sensor connectors are securely seated.
Water or evidence of water inside the electronic housing	• If water is found inside the housing please contact the manufacturer immediately.

#### **Troubleshooting Guide**

Fault	Solution
No sound or intermittent sound with older batteries	<ul> <li>Check that batteries are firmly seated between the terminals in the battery holder and are in the correct orientation. Check that the speaker and sensor connectors are securely seated.</li> <li>Make certain that the sound chip on the printed circuit board has not been dislodged. If you suspect that it is dislodged, see the instructions below.</li> <li>Replace the batteries with high-quality alkaline batteries (i.e. Duracell Ultra or better).</li> </ul>
No sound or intermittent sound with new batteries	• Allow at least five minutes for the batteries and unit to acclimatize to the environment.
	• Check that batteries are firmly seated between the terminals in the battery holder and are in the correct orientation. Check that the speaker and sensor connectors are securely seated.
	• Make certain that the sound chip on the printed circuit board has not been dislodged. If you suspect that it is dislodged, see the instructions below.
	• To eliminate the possibility of a faulty battery, replace the batteries with another set of high-quality alkaline batteries (i.e. Duracell Ultra or better). Again, allow at least five minutes for the batteries and unit to acclimatize to the environment.
The sound chip appears to be dislodged from its housing	• If ALL of the pins on the chip appear in or directly above the corresponding socket on the housing, a light and even pressure may be used to re-seat the chip. IMPORTANT – excessive or uneven pressure may cause the chip to be damaged. If in doubt, contact the manufacturer.
	• If the pins are not located in or directly above the corresponding housing socket, DO NOT attempt to use pressure to re-seat the chip. Contact the manufacturer for advice.
No sound or intermittent sound when all previous solutions have been exhausted	• The unit and its components have been designed to be easily swapped out by a skilled service technician. In the rare event of failure, please contact the manufacturer for assistance. Any attempt to tamper with the unit in any way other than advised in this guide will void the unit warranty.

## **Climbing Rope Maintenance**

- A routine check per the Maintenance Checklist is very important.
- Address any issues early!
- Monitor wear versus mis-use / vandalism.
- Avoid sand as a resilient material.



# **Addressing Frayed/Cut Ropes**

- Simple flaming technique with a handheld propane torch approved by rope manufacturer. Contact your Burke Representative for Details.
- Swift, sweeping motion with handheld torch so as not to burn or scorch the rope.
- Monitor wear of rope AFTER flaming is done.
- When metal strands are very evident, rope should be purchased / replaced.

# MAINTENANCE GFRC Maintenance

## **GFRC - Cleaning Methods**

- 1. For smaller surface areas, a scrub brush and light cleaning detergent mixed with water is the best approach. A ZEP exterior siding cleaner can be heavily diluted and scrubbed on and off with the brush.
- 2. For larger areas, you can use a pressure washer. The pressure washer should be no greater than a 1500 PSI washer. Use a 25 to 40-degree wide nozzle to prevent surface damage of the topical paints on the theme finishes. Hold the nozzle a minimum of 2' away from the surface. Clean a small, hidden test area before starting the project to ensure the pressure washer will not damage the surface. Pressure washers generate very high pressure, so it's essential to take safety precautions and follow all the manufactures instructions when using them:
  - Use both hands when holding the spray nozzle.
  - Don't use pressure washers while standing on a ladder.
  - Wear protective eyewear at all times.
  - Never point the nozzle at anyone.
- 3. An alternative to using a pressure washer is to use a *home-washing kit* that attaches to the garden hose. The kits aren't as quick or as effective as pressure washers but are easier to use and are available at most local hardware stores.

## **GFRC - Cleaning**

- 1. Cover or remove anything you don't want wet or washed from the area that is to be cleaned.
- 2. Check the theme finishes for trouble spots that are covered in mildew, mold or moss. To determine whether a trouble area is affected by mildew, apply a small amount of diluted household bleach to the area. If it clears up, the problem is mildew. Pressure washers usually don't remove mildew, so you'll need to clean those areas by hand. Scrub off the mildew using a solution of 9 parts water and 1 part bleach.
- 3. If using a power washer with a soap feed, you may use a mild solution of water and detergent, or you may also use a ZEP cleaner or alternative that is specifically for power washers, following the instructions for that specific cleaner.
- 4. If there is indication of efflorescence on the GFRC surface, this can be cleaned with a 10% muriatic acid solution.
- 5. Remember, always perform cleaning on test area and inspect for damage before proceeding.
- 6. Begin spraying the surface, holding the nozzle at a 45-degree angle. Work from the bottom up, and move across the surface from side to side at a steady pace, maintaining the 2' distance between the surface and the nozzle head.
- 7. Rinse with clean water from the top down to prevent streaks.

## **GFRC - Repairing**

- 1. Minor scuff marks can be painted with the touch up repair kit provided. Multiple colors are provided in order to blend in with the original theme and markings.
- 2. If damage requires patching, a standard water plug kit for concrete repair can be purchased at any local hardware store. Follow the instructions for repair, making sure to create a similar surface texture of rock or tree bark in the concrete while it is still wet.
- 3. Once concrete patch is dry it can be painted with the touch up repair kit provided.

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# MAINTENANCE ZipVenture Maintenance and Inspection

ZipVenture products should be inspected and maintained as specified for all playground equipment. The following are additional maintenance and inspection procedures specific to the ZipVenture products.

## **Tools Required:**

- 1. 8-ft step ladder
- 2. Ratchet wrench with Burke security bits
- 3. 9/16" & 3/4" sockets for ratchet wrench
- 4. Torque wrench
- 5. 50-lb weight with means of attaching to trolley seat (Burke recommends a sand bag and nylon webbing strap)

## Maintenance and Inspection Points:

- 1. Visually inspect entire structure for:
  - a. Loose, frayed, or tangled wires from wire rope
  - b. Broken springs at either end of cable
  - c. Loose spring brake parts (springs should be affixed to the cable at one end and not able to slide away)
  - d. Screws missing from spring brake parts
- 2. Move trolley to 20 feet from arrival (low) end of ride. Measure from the loop at the end of the wire rope. Holding seat level, measure distance from top of resilient material to bottom of seat. This should be in the range of 13 to 15 inches. If not, the tension in the wire rope will need to be adjusted. Make sure resilient material is maintained to the proper level and is consistent each time you are measuring.
- 3. Attach 50-lb weight to seat of trolley. With the trolley in the same 20 feet from arrival end position, and holding seat level, measure distance from top of resilient material to bottom of seat. This should be in the range of 11 to 13 inches. If not, the tension in the wire rope will need to be adjusted. Make sure the resilient material is maintained to the proper level and is consistent each time you are measuring.
- 4. Check tightness of fasteners. Wire rope clips should be tightened to 45 ft-lb torque.
- 5. Use ladder to inspect wire rope at center, both ends and also under the springs. As you inspect the wire rope, note that a strand is a group of wires twisted together, and multiple strands are then twisted around a central core to form the wire rope or cable. You should inspect the individual wires and the strands for any broken wires or excessive wear. If there are any broken wires, strands out of place or excessive wear, the cable should be replaced.
- 6. At the ends of the cable, there is a thimble inside the loop for reinforcement. If the thimble or the swaged fitting at the launch end of the cable is cracked, split, or broken, that piece or the entire cable (in the case of the swaged end) shall be replaced.
- 7. Using the ladder, remove the outer covers from the trolley. Remove the nuts from the bolts that hold the trolley case together and remove one side of the case. Roll the trolley back and forth a few inches on the rope and observe the pulleys. If a pulley does any of the following, replace both pulleys:
  - a. Fails to roll and slides along the rope,
  - b. Has its inner race rotate with the outer part of the pulley,

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- c. Makes a clicking noise, or
- d. Wobbles (make sure it is the pulley, not the mounting bolt moving)
- 8. Inspect the sliders which cover the holes where the rope enters and exits the trolley. If they are broken or worn to less than 3/32" (.094) thick at any point then replace all of the sliders.
- 9. Inspect the pendulum and bronze bearing attached to the trolley which support the seat chain. If the bronze bearing is excessively worn (oblong hole, split or cracked) or missing then replace the bearing.
- 10. Reassemble trolley and replace the covers. Make sure to apply Loctite when reattaching the hardware.
- 11. Check the link at the launch end and the turnbuckle at the arrival end. Both should move freely up and down, left and right. If not then the spherical bearings should be replaced.
- 12. Check the spring assemblies at both ends. Look for broken or bent springs, damage to the plastic parts that secure the springs, missing set screws, and wear of the rubber bumpers. Replace any parts that need it.

Note: All bearings are lubricated for life. If a bearing is worn out then it must be replaced.

# **Frequency of General Maintenance**

How Often	Check	Swings	Slides	Climbers	Structures	Animals	Whirls
Daily	Open S Hooks	X		Х	Х		
Daily	Broken Anchor Bolts	Х	Х	Х	Х	Х	Х
Daily	Worn Chains	Х		Х	Х		
Daily	Broken Guardrails/Handrails	Х	Х	Х	Х	Х	Х
Daily	Sharp Edges	Х	Х	Х	Х	Х	Х
Daily	Loose or Missing Nuts/Bolts	Х	Х	Х	Х	Х	Х
Daily	Sharp Points/Protrusions	Х	Х	Х	Х	Х	Х
Daily	Unplugged Holes in Pipe	Х	Х	Х	Х	Х	Х
Daily/Weekly	Broken Welds	Х	Х	Х	Х	Х	Х
Daily/Weekly	Inadequate Surfacing	Х	Х	X	Х	Х	Х
Daily/Weekly	Ropes for cuts or fraying with exposed steel reinforcement strands			Х	Х		
Daily/Weekly	Vandalized or Cracked PVC Coating	Х		Х	Х		
Weekly	Worn Pinions/Clevises	Х		Х	Х		
Weekly	Exposed Footings	Х	Х	Х	Х	Х	Х
Weekly	Worn Bearings	Х			Х		Х
Weekly	Rust of Metal	Х	Х	Х	Х	Х	Х
Weekly	Corrosion of Aluminum	Х	Х	Х	Х	Х	Х
Monthly	Add grease lubrication to wheel bearings	Х			Х		Х
Monthly	Play Mat (integrity and adhesion to surface if applicable)	Х	Х	Х	Х	Х	Х
Spring/Fall	Pinch Points	Х	Х	Х	Х	Х	Х
Inclement Weather (High winds, Snow)	Remove Shade Canopy/ARA Shade				Х		

## **General Maintenance Checklist**

Date			T	I						
		-								 
Visible cracks, bending, warping		 								
Accessible sharp edges of points		 _								 
Rusted metal surfaces		 								
Rusting of metal and corrosion on										
aluminum		 								
Deformation of open hooks, rings, links,*										
etc.		 _								
Worn swing hangers and chain		 							 	 
Missing or damaged swing seats		 _								
Heavy swing seats with sharp corners or*										
edges										
Broken supports/anchors										
Jagged, exposed or cracked and loose										
concrete footing										
Inadequate surfacing material under *										
equipment										
Exposed ends of pipe. Missing caps or *										
plugs										
Protruding bolt ends *										
Chipped or peeling paint										
Cuts or fraying in rope with exposed										
steel reinforcement strands										
Vandalism, broken glass, trash, etc.										
Broken or missing rails, steps, rungs,										
seats										
Loose or missing hardware										
Crush or Shear points *										
Moving components, etc.										
Lack of lubrication on moving parts										
Worn bearings										
Poor drainage areas at footings, slide										
exits, etc										
Vandalized or cracked PVC coating			1							
	 	 	1	1	I	L	L	۱ <u> </u>		

\*for further definition, reference ASTM F1487

### **Directions:**

- 1. Start by reading instructions
- 2. Write in date of inspection
- 3. Check each item of inspection as it applies to your equipment
- 4. Make copy and file with your permanent records

## SUGGESTED PUBLIC PLAYGROUND LEADERS CHECKLIST

- Prepare written guidelines for playground operation, defining goals and procedures.
- Provide for constant supervision by establishing a written schedule.
- Conduct daily cleaning and check for broken glass and other litter.
- Do not permit children to use wet or damaged equipment.
- Constantly observe play patterns to note possible hazards and suggest appropriate equipment or usage changes.
- Prepare written accident reports with special attention to surface conditions, type and extent of injury, age and sex of child, how the accident occurred, and weather conditions.
- Insist on first aid and accident training for playground leaders.
- Instruct children and playground supervisors on how to use equipment. (Playground equipment safety should be taught in the classroom.)
- Do not permit too many children on the same piece of equipment at the same time; suggest that children take turns, or direct their attention toward other equipment or activities.
- Make periodic checkups and request that worn or damaged pieces of equipment be replaced.

BCI Burke Company, LLC

For questions, call us at:

1-800-356-2070

## BCI Burke Generations Warranty<sup>®</sup> The Longest and Strongest warranty in the industry

BCI Burke Company, LLC ("Burke") warrants that all standard products are warranted to be free from defects in materials and workmanship, under normal use and service, for a period of one (1) year from the date of invoice.

# We stand behind our products.

In addition, the following products are warranted, under normal use and service from the date of invoice as follows:

- One Hundred (100) Year Limited Warranty on aluminum and steel upright posts (including Intensity<sup>®</sup>, Voltage<sup>®</sup>, Nucleus<sup>®</sup> and Little Buddies<sup>®</sup>) against structural failure due to corrosion, deterioration or workmanship.
- One Hundred (100) Year Limited Warranty on KoreKonnect<sup>®</sup> clamps against structural failure due to corrosion, deterioration or workmanship.
- One Hundred (100) Year Limited Warranty on Hardware (nuts, bolts, washers).
- One Hundred (100) Year Limited Warranty on bolt-through fastening and clamp systems (Voltage<sup>®</sup>, Intensity<sup>®</sup>, Nucleus<sup>®</sup> and Little Buddies<sup>®</sup>).
- Twenty-Five (25) Year Limited Warranty on spring assemblies and aluminum cast animals.
- Fifteen (15) Year Limited Warranty on main structure platforms and decks, metal roofs, table tops, bench tops, railings, loops and rungs.
- Fifteen (15) Year Limited Warranty on all plastic components including StoneBorders against structural failure due to materials or workmanship.
- Ten (10) Year Limited Warranty on ShadePlay Canopies fabric, threads, and cables against degradation, cracking or material breakdown resulting from ultra-violet exposure, natural deterioration or manufacturing defects. This warranty is limited to the design loads as stated in the specifications.
- Ten (10) Year Limited Warranty on NaturePlay<sup>®</sup> Boulders and GFRC products against structural failure due to natural deterioration or workmanship. Natural wear, which may occur with any concrete product with age, is excluded from this warranty.
- Ten (10) Year Limited Warranty on Full Color Custom Signage against manufacturing defects that cause delamination or degradation of the sign. Full Color Custom Signs also carry a two (2) year warranty against premature fading of the print and graphics on the signs.
- Five (5) Year Limited Warranty on Intensity<sup>®</sup> and RopeVenture<sup>™</sup> cables against premature wear due to natural deterioration or manufacturing defects. Determination of premature wear will be at the manufacturer's discretion.
- Five (5) Year Limited Warranty on swing seats and hangers; Kid Koaster<sup>®</sup> Trolleys and other moving parts against structural failure due to materials or workmanship.
- Three (3) Year Limited Warranty on electronic panel speakers, sound chips and circuit boards against electronic failure caused by manufacturing defects.

The warranty stated above is valid only if the equipment is erected in conformity with the layout plan and/or installation instructions furnished by BCI Burke Company, LLC using approved parts; have been maintained and inspected in accordance with BCI Burke Company, LLC instructions. Burke's liability and your exclusive remedy hereunder will be limited to repair or replacement of those parts found in Burke's reasonable judgment to be defective. Any claim made within the above stated

### BCI Burke Company, LLC

660 Van Dyne Road • P.O. Box 549 • Fond du Lac, WI 54936-0549 • (920) 921-9220 • 1-800-356-2070 • Fax (920) 921-9566 <u>www.bciburke.com</u> warranty periods must be made promptly after discovery of the defect. A part is covered only for the original warranty period of the applicable part. Replacement parts carry the applicable warranty from the date of shipment of the replacement from Burke. After the expiration of the warranty period, you must pay for all parts, transportation and service charges.

Burke reserves the right to accept or reject any claim in whole or in part. Burke will not accept the return of any product without its prior written approval. Burke will assume transportation charges for shipment of the returned product if it is returned in strict compliance with Burke's written instructions.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IF THE FOREGOING DISCLAIMER OF ADDITIONAL WARRANTIES IS NOT GIVEN FULL FORCE AND EFFECT, ANY RESULTING ADDITIONAL WARRANTY SHALL BE LIMITED IN DURATION TO THE EXPRESS WARRANTIES AND BE OTHERWISE SUBJECT TO AND LIMITED BY THE TERMS OF BURKE'S PRODUCT WARRANTY. SOME STATES DO NOT ALLOW THE EXCLUSION OF CERTAIN IMPLIED WARRANTIES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

Warranty Exclusions: The above stated warranties do not cover: "cosmetic" defects, such as scratches, dents, marring, or fading; damage due to incorrect installation, vandalism, misuse, accident, wear and tear from normal use, exposure to extreme weather; immersion in salt or chlorine water, unauthorized repair or modification, abnormal use, lack of maintenance, or other cause not within Burke's control; and

Limitation of Remedies: Burke is not liable for consequential or incidental damages, including but not limited to labor costs or lost profits resulting from the use of or inability to use the products or from the products being incorporated in or becoming a component of any other product. If, after a reasonable number of repeated efforts, Burke is unable to repair or replace a defective or nonconforming product, Burke shall have the option to accept return of the product, or part thereof, if such does not substantially impair its value, and return the purchase price as the buyer's entire and exclusive remedy. Without limiting the generality of the foregoing, Burke will not be responsible for labor costs involved in the removal of products or the installation of replacement products. Some states do not allow the exclusion of incidental damages, so the above exclusion may not apply to you.

## **Terms of Sale**

**Pricing:** Prices published in this catalog are in USD, are approximate and do not include shipping & handling, surfacing, installation nor applicable taxes.

All prices are subject to change without notice. Contact your Burke representative for current pricing. Payments are to be made in USD.

Weights: Weights are approximate and may vary with actual orders.

**Installation:** All equipment is shipped unassembled. For a list of factory-certified installers in your area, please contact your Burke representative.

BCI Burke Company, LLC 660 Van Dyne Road • P.O. Box 549 • Fond du Lac, WI 54936-0549 • (920) 921-9220 • 1-800-356-2070 • Fax (920) 921-9566 www.bciburke.com **Specifications:** Product specifications in this catalog were correct at the time of publication. However, product improvements are ongoing at Burke, and we reserve the right to change or discontinue specifications without notice.

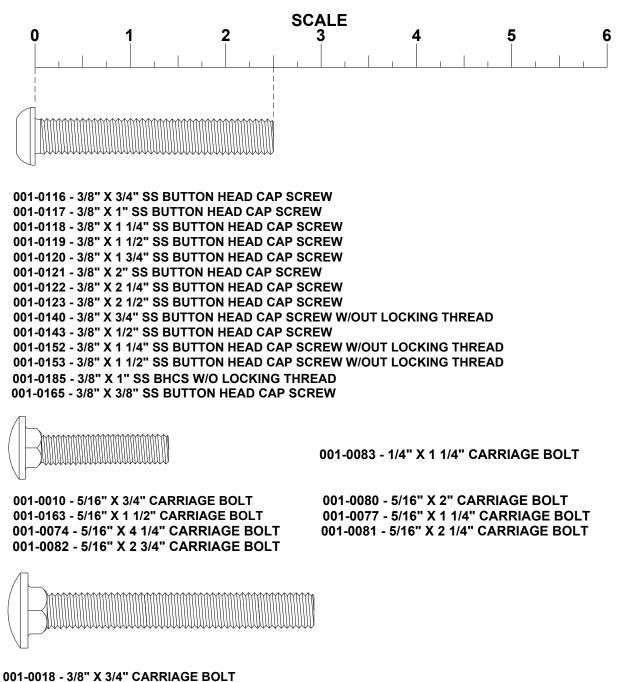
**Loss or Damage in Transit:** A signed bill of lading is our receipt from a carrier that our shipment to you was complete and in good condition upon arrival. Before you sign, please check the Bill of Lading carefully when the shipment arrives to make sure nothing is missing and there are no damages. Once the shipment leaves our plant, we are no longer responsible for any damage, loss or shortage.

For more information regarding the warranty, call Customer Service at 920-921-9220 or 1-800-356-2070.

### APPENDIX

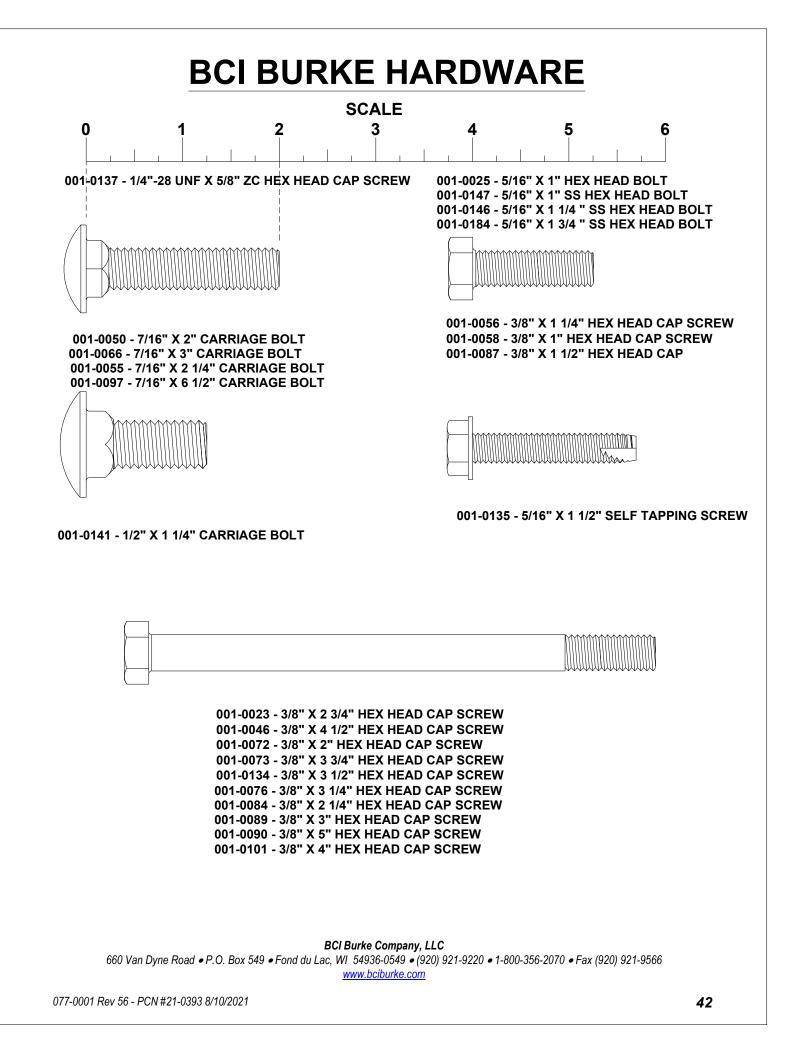
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# **BCI BURKE HARDWARE**

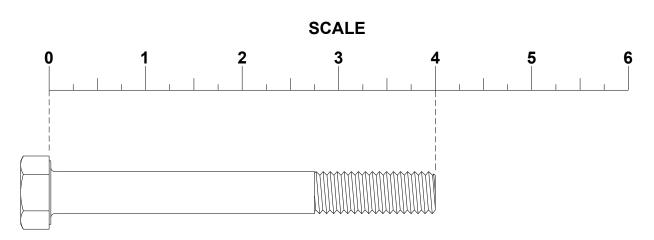


001-0018 - 3/8" X 3/4" CARRIAGE BOLT 001-0048 - 3/8" X 2 3/4" CARRIAGE BOLT 001-0098 - 3/8" X 3" CARRIAGE BOLT 001-0053 - 3/8" X 2 1/4" CARRIAGE BOLT 001-0039 - 3/8" X 2 1/2" CARRIAGE BOLT 001-0054 - 3/8" X 2 1/2" CARRIAGE BOLT 001-0068 - 3/8" X 1 1/4" CARRIAGE BOLT

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# **BCI BURKE HARDWARE**



001-0096 - 7/16" X 3 1/2" HEX HEAD CAP SCREW 001-0132 - 7/16" X 4" HEX HEAD CAP SCREW 001-0062 - 7/16" X 1 1/4" HEX HEAD CAP SCREW 001-0049 - 7/16" X 4 1/2" HEX HEAD CAP SCREW



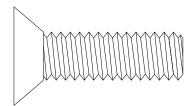
001-0037 - 7/16" X 3" HEX HEAD CAP SCREW - SLOTTED 001-0047 - 7/16" X 4 1/2" HEX HEAD CAP SCREW - SLOTTED

001-0099 - 1/2" X 4 1/2" HEX HEAD CAP SCREW 001-0057 - 1/2" X 1 1/4" HEX HEAD CAP SCREW

001-0160 - 1/2" X 1 1/4" HEX HEAD CAP SCREW - GRADE 8

001-0170 - 1/2" X 5" FULLY THREADED HEX HEAD SCREW

001-0186 - 3/8" X 1 1/4" SS FLAT COUNTERSUNK HEAD CAP SCREW



001-0139 - 1/2" X 1 3/4" SS FLAT COUNTERSUNK HEAD CAP SCREW







002-0003 - 5/16" LOCK NUT

002-0012 - 3/8" LOCK NUT 002-0018 - 3/8" NUT 002-0036 - 3/8" SS NUT

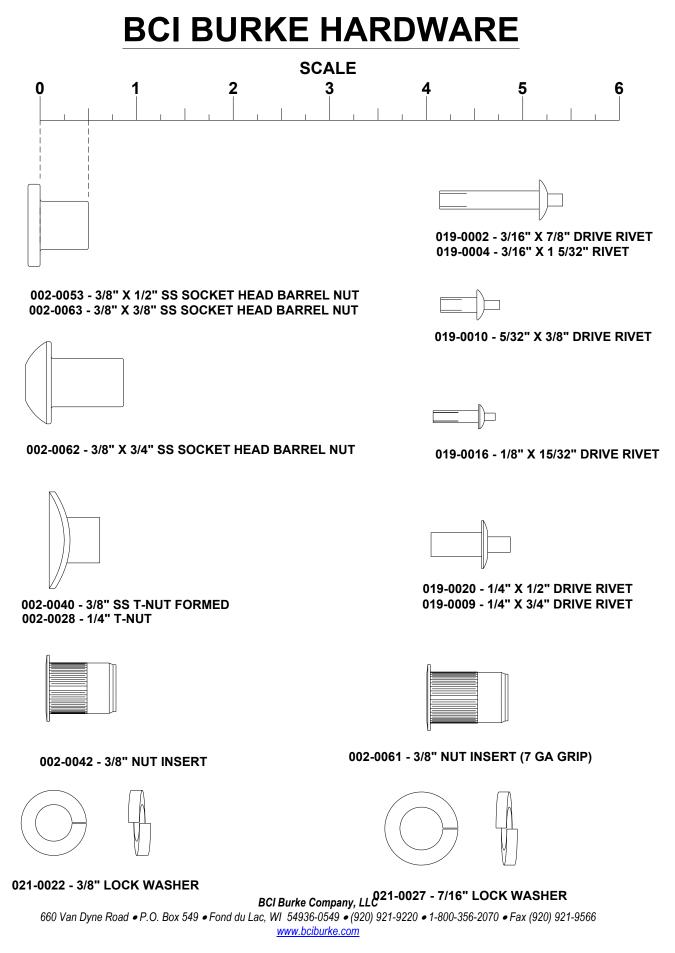
002-0005 - 7/16" LOCK NUT



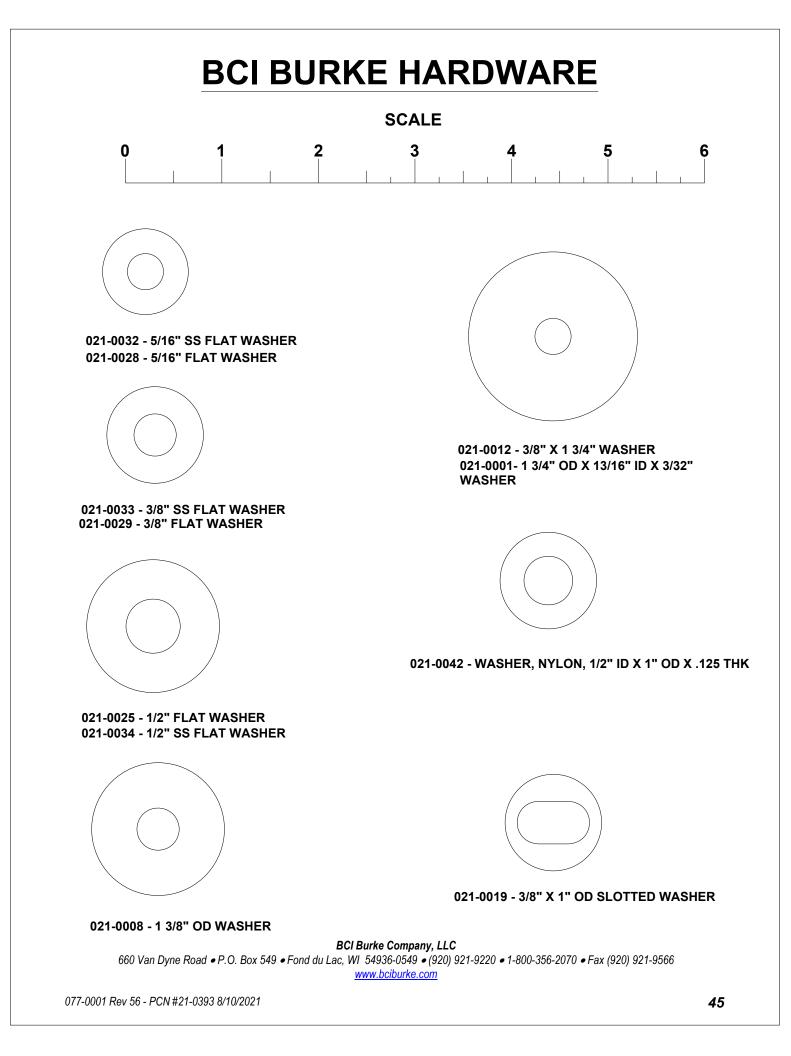
002-0004 - 1/2" LOCK NUT 002-0049 - 1/2" SS LOCK NUT

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077-0001 Rev 56 - PCN #21-0393 8/10/2021



077-0001 Rev 56 - PCN #21-0393 8/10/2021

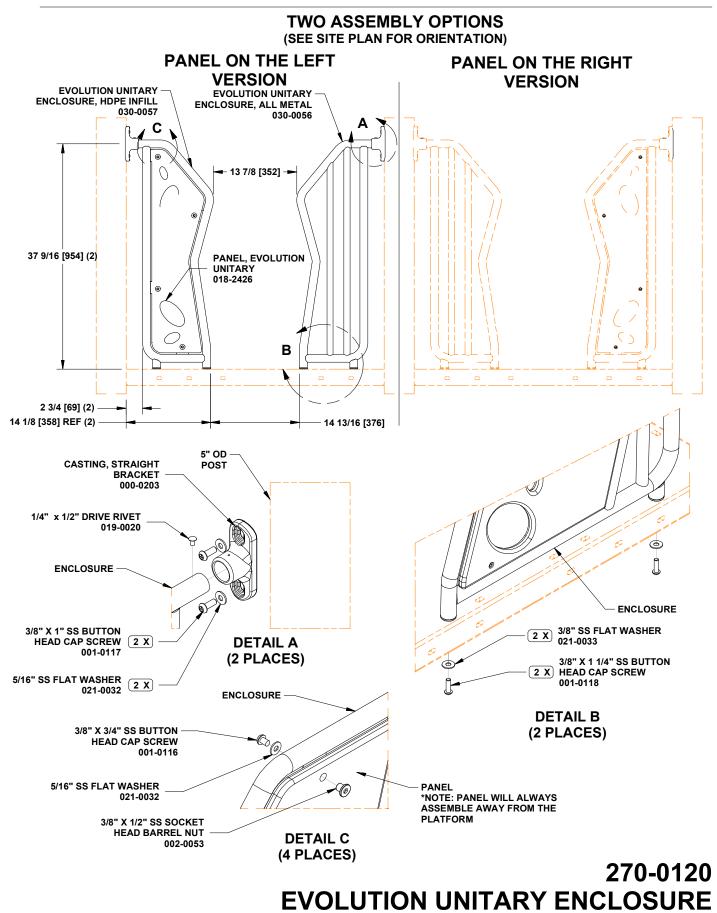


**Installation Instructions** 

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	PARTS LIST		1 [	SPECIFICATIONS
PART NO.	DESCRIPTION	QTY		CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat-
000-0203	CASTING, STRAIGHT BRACKET	2		Treated. Finished with baked on powder coating.
018-2426	PANEL, EVOLUTION UNITARY	1		PANEL, EVOLUTION UNITARY: 3/4" Extruded HDPE.
030-0056	EVOLUTION UNITARY ENCLOSURE, ALL METAL	1		EVOLUTION UNITARY ENCLOSURE, ALL METAL: One peice all welded construction consisting of 1.315" OD x 12 GA and
030-0057	EVOLUTION UNITARY ENCLOSURE, HDPE INFILL	1		1.029" OD x 14 GA galvanized steel tubing. Finished with baked on powder coating.
036-1544		<u>1</u>		EVOLUTION UNITARY ENCLOSURE, HDPE INFILL: One peice all welded construction consisting of 1.315" OD x 12 GA galvanized steel tubing and 10 GA galvanized steel sheeting. Finished with baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless Steel.
	ardware package(s) may include extra hard necessary for this installation.	aware		SHIPPING WEIGHT: 34 LBS.

### INSTALLATION INSTRUCTIONS

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

1. Insert CASTING, STRAIGHT BRACKETs onto ends of EVOLUTION UNITARY ENCLOSURE, ALL METAL and EVOLUTION UNITARY ENCLOSURE, HDPE INFILL and fasten the top hole of castings to the posts using hardware specified in DETAIL A.

2. Rotate unitary enclosures up 90 degrees and fasten bottom hole of castings to posts using hardware specified in DETAIL A.

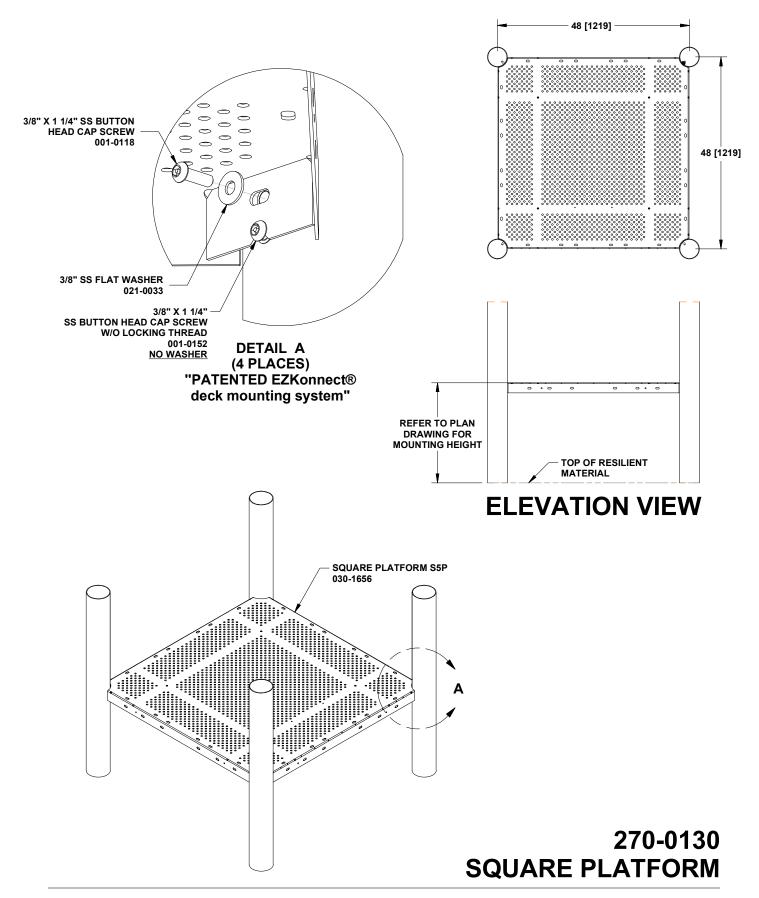
3. Rotate unitary enclosures down 90 degrees and attach to platform using hardware specified in DETAIL B.

4. Drill 1/4" diameter hole through the castings and enclosures, using the pilot hole in the castings. Drive in rivet, as specified in DETAIL A, until center pin is flush.

5. Attach PANEL, EVOLUTION UNITARY to enclosure using hardware specified in DETAIL C. Panel should be on the side away from the platform.

6. Tighten all hardware.





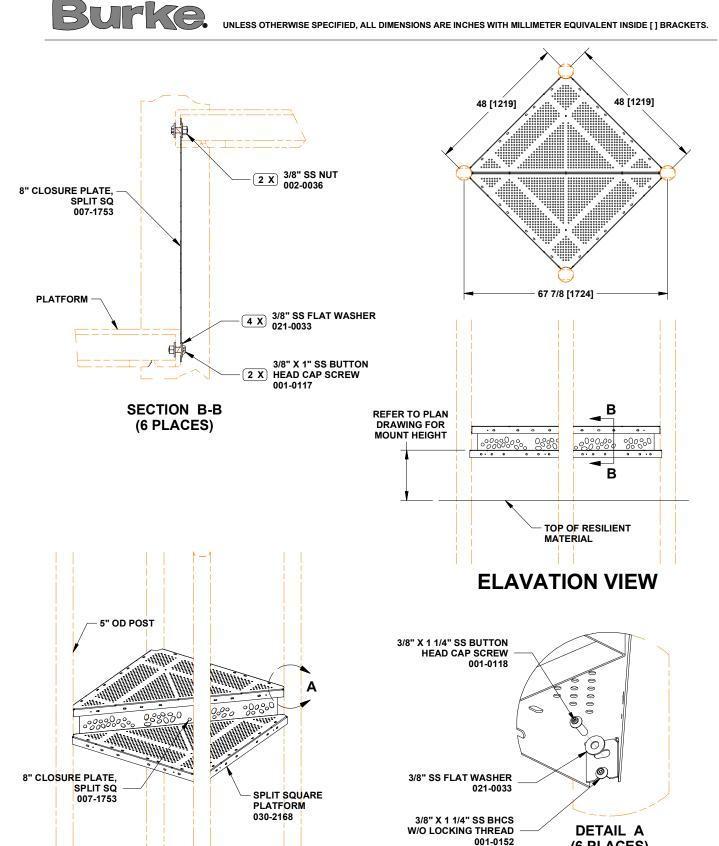
	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	QTY	SQUARE PLATFORM S5P: 12 GA HRPO sheet, finished with a
030-1656	SQUARE PLATFORM S5P	1	PVC Coating.
036-1101	HARDWARE PACKAGE	1	HARDWARE PACKAGE: Stainless steel.
NOTE: Hai	rdware package(s) may include extra ha ecessary for this installation.	ardware	SHIPPING WEIGHT: 106 LBS.
			hales of words hadens installation
NOTE: PVC	coating may need to be removed fro	m mounting	noles of parts before installation.

NOTE: Do not tighten hardware until instructed to do so.

- 1. Locate the double sets of platform mounting holes in each post.
- Attach with patented EZKonnect® deck mountiing system. Partially thread a 3/8" x 1 1/4" SS button head cap screw
   W/O LOCKING THREAD into the lower hole of the double set of mounting holes WITHOUT a washer.

DO NOT TIGHTEN. See DETAIL A.

- 3. Slide the four corners of the SQUARE PLATFORM onto the partially threaded cap screws on each post.
- Complete attaching platform to posts by using 3/8" x 1 1/4" SS button head cap screws and 3/8" SS flat washers to secure platform into upper mounting hole. See DETAIL A.
- 5. Level platform and plumb posts.
- 6. Tighten all hardware.
- 7. Pour concrete. Let set for two to three days.
- 8. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



# \*NO WASHER (6 PLACES)

# 270-0301 SPLIT SQUARE PLATFORM, CLOSURE PLATE

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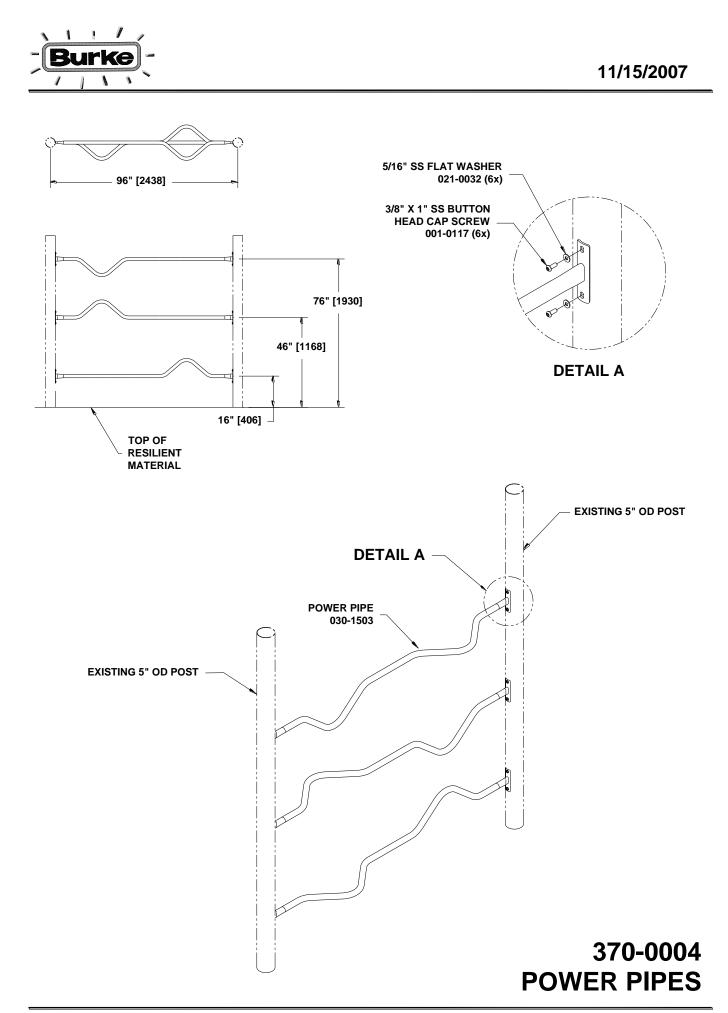
	PARTS LIST		] [	SPECIFICATIONS
PART NO.	DESCRIPTION	QTY		8" CLOSURE PLATE, SPLIT SQUARE: 14 GA galvanized steel
007-1753	8" CLOSURE PLATE, SPLIT SQ	1		plate finished with a baked-on powder coating.
030-2168	SPLIT SQUARE PLATFORM	2		SPLIT SQUARE PLATFORM: 12 GA HRPO sheet, finished with
036-1107	HARDWARE PACKAGE	1		a PVC Coating
				HARDWARE PACKAGE: Stainless steel
NOTE: Hat that is not	ardware package(s) may include extra har necessary for this installation.	dware		SHIPPING WEIGHT: 108 LBS.

### INSTALLATION INSTRUCTIONS

#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Locate the double sets of platform mounting holes in each post.
- 2. Partially thread a 3/8" x 1 1/4" SS button head cap screw W/O LOCKING THREAD into the lower hole of the double set of mounting holes WITHOUT a washer. **DO NOT TIGHTEN**. See DETAIL A.
- 3. Slide the three corners of the SPLIT SQUARE PLATFORM onto the partially threaded cap screws on each post.
- 4. Complete attaching platform to posts by using 3/8" x 1 1/4" SS button head cap screws and 3/8" SS flat washers to secure platform into upper mounting hole. See DETAIL A.
- 5. Level platform and plumb posts.
- Attach CLOSURE PLATE to platforms using 3/8" x 1" SS button head cap screws, 3/8" washers, and 3/8" nuts. See SECTION B-B.
- 7. Tighten all hardware.
- 8. Pour concrete. Let set for two to three days.
- 9. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

270-0301 SPLIT SQUARE PLATFORM, CLOSURE PLATE REV: 00 PCN: 21-0094 3/31/2021



	— PARTS LIST —		SPECIFICATIONS
	PARTS LIST <u>DESCRIPTION</u> POWER PIPE HARDWARE PACKAGE	<u>QTY</u> 3 6	SPECIFICATIONS         POWER PIPE: One piece all welded construction consisting of formed 1.600" OD x 12 GA galvanized steel tubing and 7 GA stainless steel sheet. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel.
Note: Hardwa that is not neo	are package(s) may include extr cessary for this installation.	a hardware	SHIPPING WEIGHT: 48 LBS.

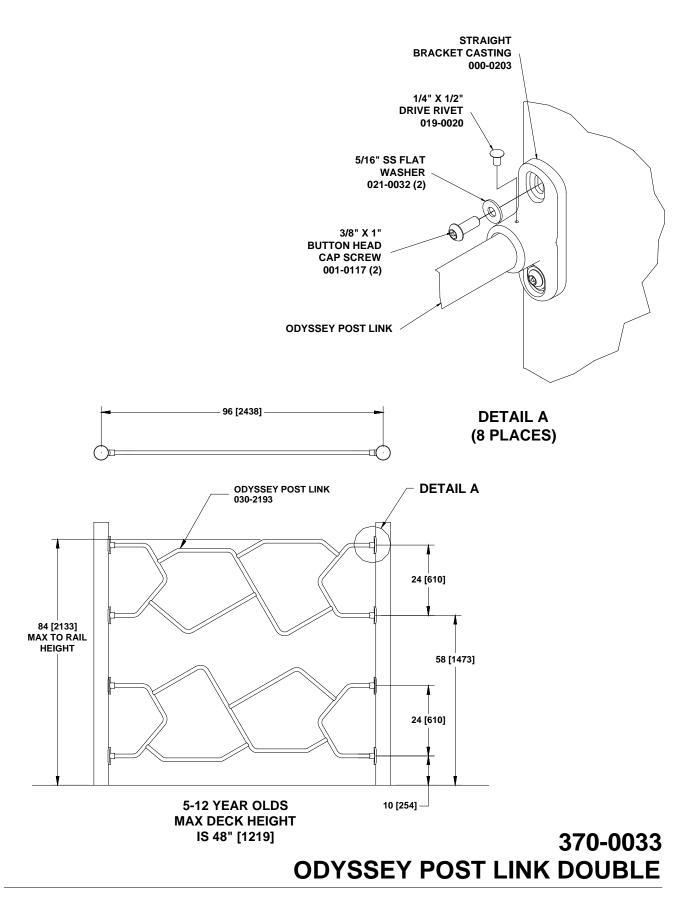
### INSTALLATION INSTRUCTIONS

- 1. Attach POWER PIPES to posts using 3/8" x 1" SS button head cap screw and 5/16" SS flat washer. See DETAIL A.
- 2. Tighten all hardware.
- 3. INSTALL RESILIENT SURFACING MATERIAL IN ACCORDANCE TO INSTALLATION GUIDELINES.

370-0004.doc Description: POWER PIPES CLIMBER REV: 00 PCN: 07-0016 11/15/2007



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.



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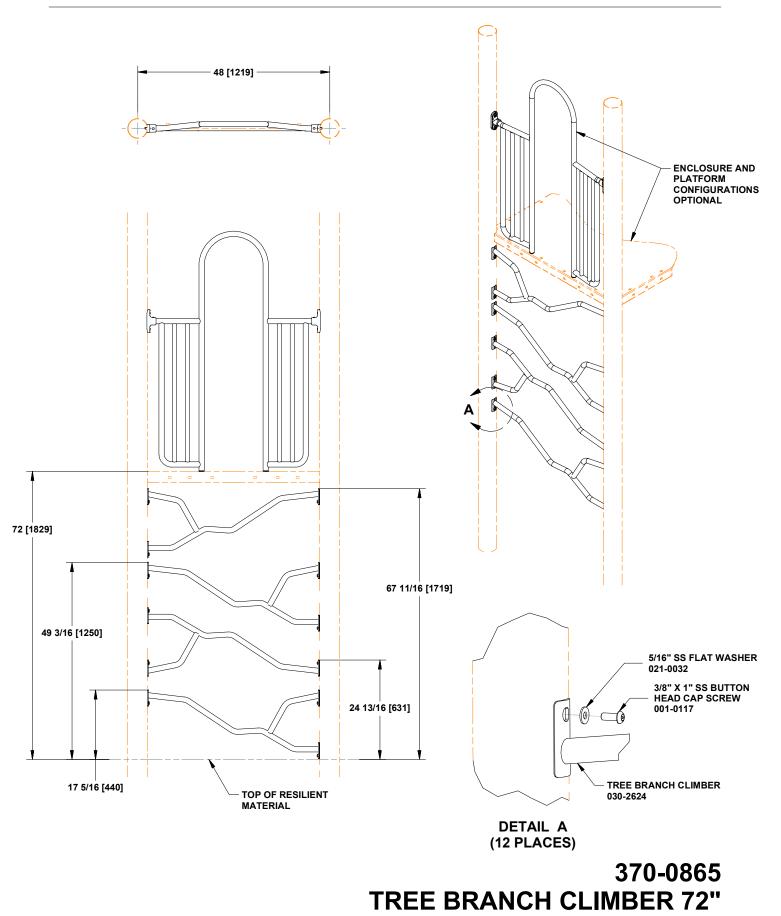
	PARTS LIST		Г	SPECIFICATIONS
PART NO. 000-0203 030-2193 036-0258 036-0819	DESCRIPTION CASTING, STRAIGHT BRACKET ODYSSEY POST LINK HARDWARE PACKAGE HARDWARE PACKAGE	<u>QTY</u> 8 2 8 4		SPECIFICATIONS CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating. ODYSSEY POST LINK : Weldment consisting of formed 1.315" OD x 12 GA galvanized tubing. Finished with a baked on powder coat finish. HARDWARE PACKAGE: Stainless steel. HARDWARE PACKAGE: Aluminum Rivets
Note: Hardw that is not ne	rare package(s) may include extra harc ecessary for this installation.	lware		SHIPPING WEIGHT: 79 LBS.

### INSTALLATION INSTRUCTIONS

- 1. Dig footing holes per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Locate mounting holes for ODYSSEY POST LINKS on 5" OD posts.
- 3. Sleeve CASTING BRACKET onto ends of ODYSSEY POST LINKS. See DETAIL A.
- 4. Place ODYSSEY POST LINKS with brackets into position with 5" OD posts and fasten using hardware specified in DETAIL A.
- 5. Tighten all hardware.
- 6. Drill 1/4" diameter holes through pilot hole in mount bracket and into enclosure. Drive rivets flush with brackets and handrails. See DETAIL E.
- 7. Block-up, level and plumb climber.
- 8. Pour concrete. Let set for two to three days.
- 9. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

370-0033.doc Description: ODYSSEY POST LINK DOUBLE REV: 00 PCN: 12-0167 12/3/2012





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Telephone 920-921-9220

PARTS LIST		SPECIFICATIONS
PART NO. DESCRIPTION           030-2624         TREE BRANCH CLIMBER           036-0040         HARDWARE PACKAGE		TREE BRANCH CLIMBER: One piece all welded construction consisting of 1.315" OD x 12 GA galvanized steel tubing, and 7 GA stainlees steel sheet. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless Steel.
<b>NOTE:</b> Hardware package(s) may inclue that is not necessary for this installation.	de extra hardware	SHIPPING WEIGHT: 33 LBS.

### INSTALLATION INSTRUCTIONS

NOTE: Do not tighten hardware until instructed to do so.

1. Locate correct post to assemble climber to, from site plan.

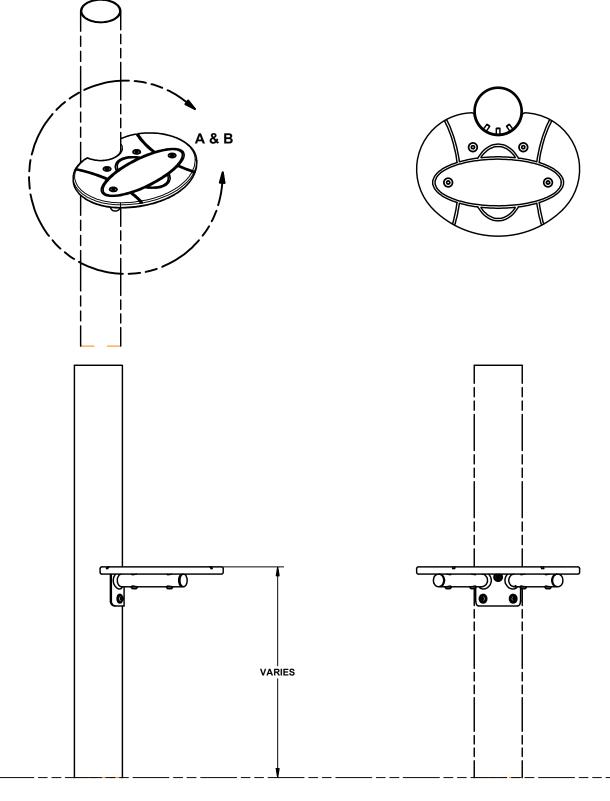
2. Attach climber to post using hardware specified in DETAIL A. Repeat for remaining climbers.

3. Tighten all hardware.

4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

370-0865 TREE BRANCH CLIMBER 72" REV: 00 PCN: 17-0217 11/7/2017

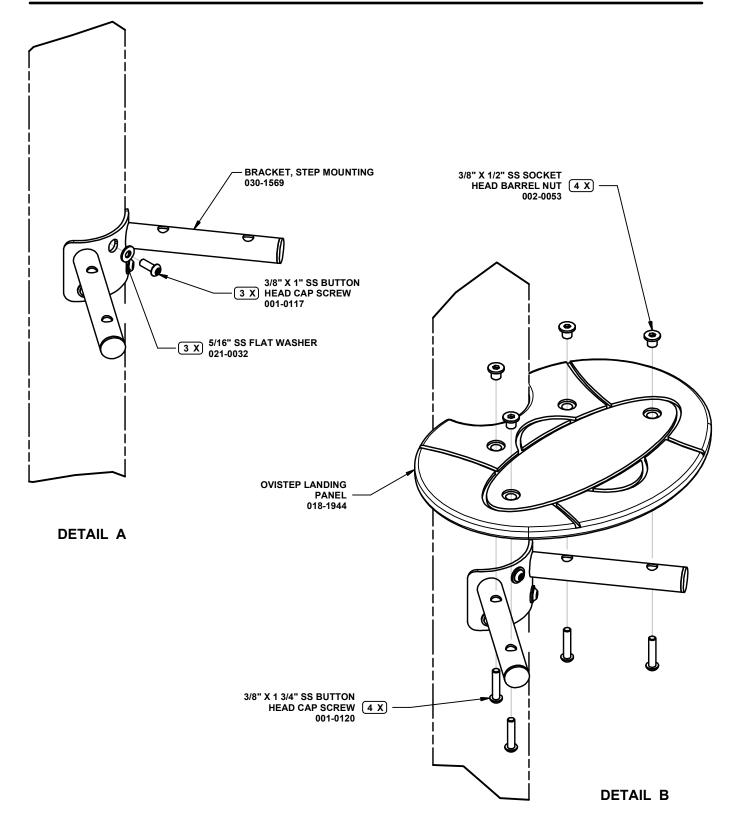




# 370-1608 OVISTEP LAUNCH PAD



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.

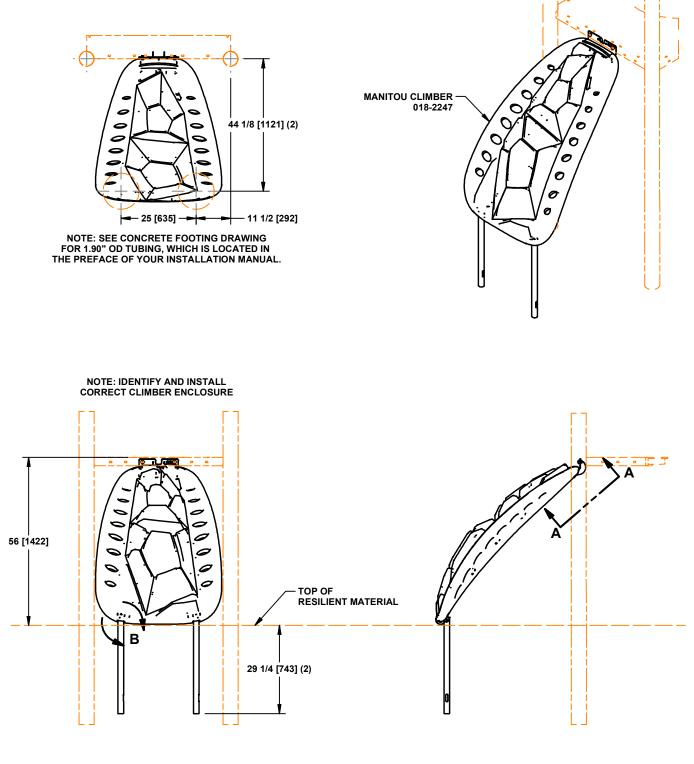


# 370-1608 OVISTEP LAUNCH PAD

PARTS LIST		SPECIFICATIONS			
PART NO. DESCRIPTION	<u>QTY</u>	OVISTEP LANDING PANEL: 3/4" co-extruded HDPE.			
018-1944       OVISTEP LANDING PANEL         030-1569       BRACKET, STEP MOUNTING         036-1305       HARDWARE PACKAGE         NOTE:       Hardware package(s) may include extra that is not necessary for this installation.	1 1 1	BRACKET, STEP MOUNTING: One piece all welded construction consisting of 10 GA galvanized sheet steel, 7 GA stainless steel sheet and 1.315" OD x 12 GA galvanized steel tubing. Finished with a baked on powder coating. HARDWARE PACKAGE: Stainless steel. SHIPPING WEIGHT: 9.55 LBS.			
INS <sup>-</sup>	INSTALLATION INSTRUCTIONS				

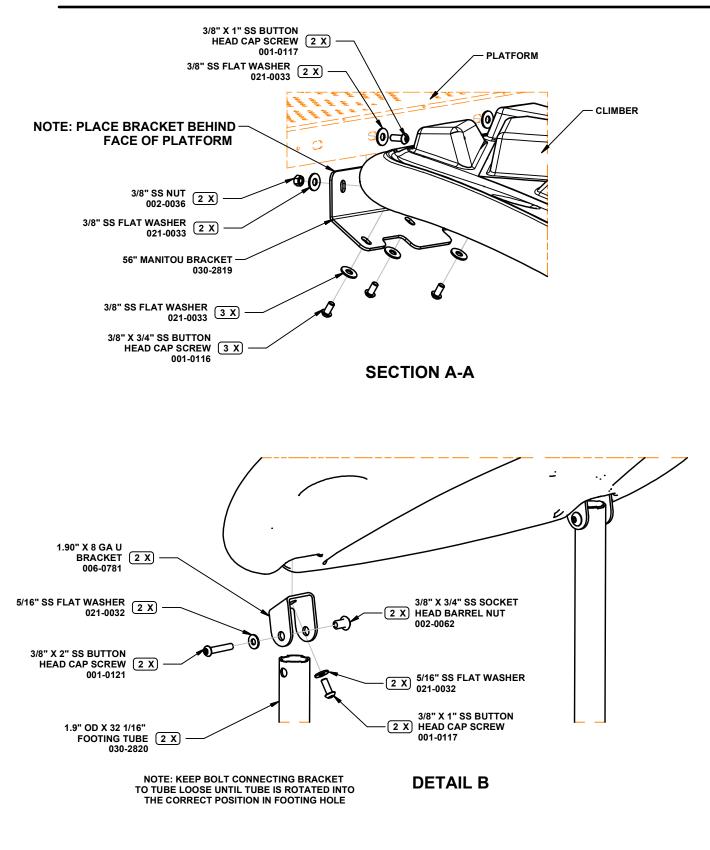
- 1. Attach STEP MOUNTING BRACKET to post using hardware specified in DETAIL A.
- 2. Attach OVISTEP LANDING PANEL to Step Mounting Bracket using hardware specified in DETAIL B.
- 3. Plumb and level component. Tighten all hardware.
- 4. INSTALL RESILIENT SURFACING MATERIAL IN ACCORDANCE TO INSTALLATION GUIDELINES.





# 370-1646 MANITOU CLIMBER 56"





# 370-1646 MANITOU CLIMBER 56"

	PARTS LIST		1 (	SPECIFICATIONS			
PART NO.	DESCRIPTION	<u>QTY</u>		1.90" X 8 GA U BRACKET: Formed 8 GA galvanzied sheet			
006-0781	1.90" X 8 GA U BRACKET	2		finished with a baked-on powder coat.			
018-2247	MANITOU CLIMBER	1		MANITOU CLIMBER: 1/4" thick, linear, low density, rotationally			
030-2819	56" MANITOU BRACKET	1		molded, U.V. stabilized polyethylene with double wall			
030-2820	1.9" OD X 32 1/16" FOOTING TUBE	2		construction, molded in 3/8" T-nut inserts, and a textured			
036-2060	HARDWARE PACKAGE	1		surface.			
				<ul> <li><u>56" MANITOU BRACKET:</u> One piece welded construction consisting of formed 8 GA galvanized sheet steel finished with a baked-on powder coat.</li> <li><u>1.9" OD X 32 1/16" FOOTING TUBE:</u> One piece welded construction consisting of 1.90" OD X 11 GA galvanized steel tubing and a 12 GA galvanized steel cap finished with a baked-on powder coat.</li> <li><u>HARDWARE PACKAGE:</u> Stainless Steel</li> </ul>			
	ardware package(s) may include extra harc necessary for this installation.	lware		SHIPPING WEIGHT: 87 LBS.			
<ul> <li>Note: Do not tighten hardware until instructed to to so</li> <li>Note: PVC may need to be removed from mounting slots of platforms before installation.</li> <li>1. Locate and dig footing holes per dimensions specified in TOP VIEW. Refer to typical concrete footer guidelines located in the preface of your installation manual.</li> <li>2. Attach 56" MANITOU BRACKET to back of platform using hardware specified in SECTION A-A.</li> <li>3. Attach 1.90" X 8 GA U BRACKETS to MANITOU CLIMBER using hardware specified in DETAIL B. Note: This may be a tight fit into the recessed pocket, tighten the screw to ensure the bracket is fully seated.</li> <li>4. Tighten Hardware</li> </ul>							

5. Attach 1.9" OD X 32 1/16" FOOTING TUBES to 1.90" X 8 GA U BRACKETS using hardware specified in DETAL B.

NOTE: Leave bolts from step 5 loose until climber is attached and footing tubes are placed in footer holes.

6. Attach climber assembly to 56" MANITOU BRACKET using hardware specifed in SECTION A-A.

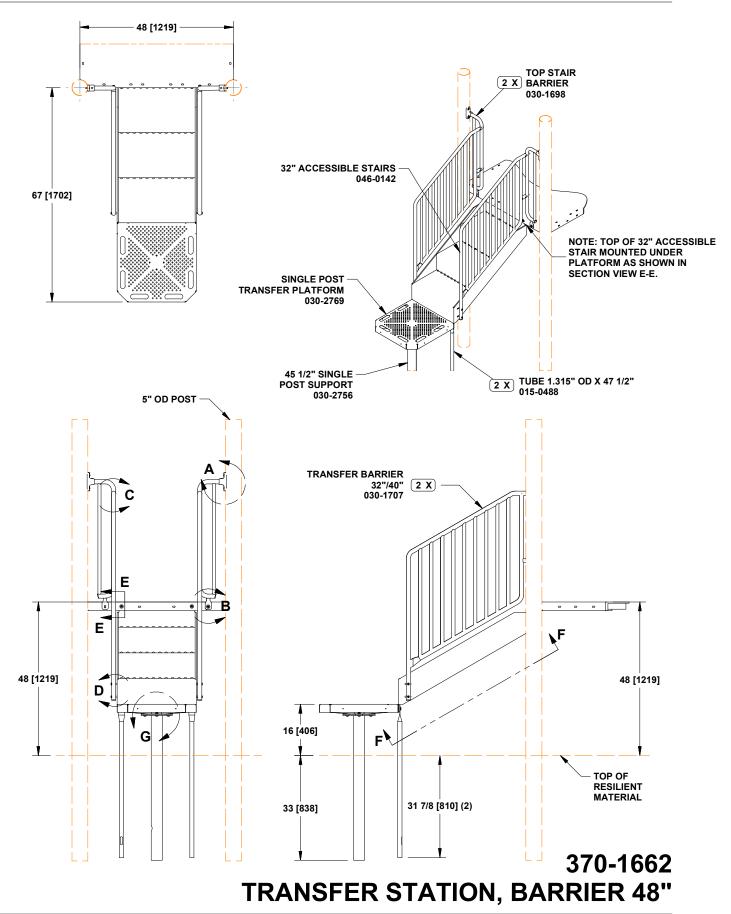
7. Block up, level and plumb assembly.

8. Tighten all hardware

9. Pour concrete and allow concrete set for 2-3 days.

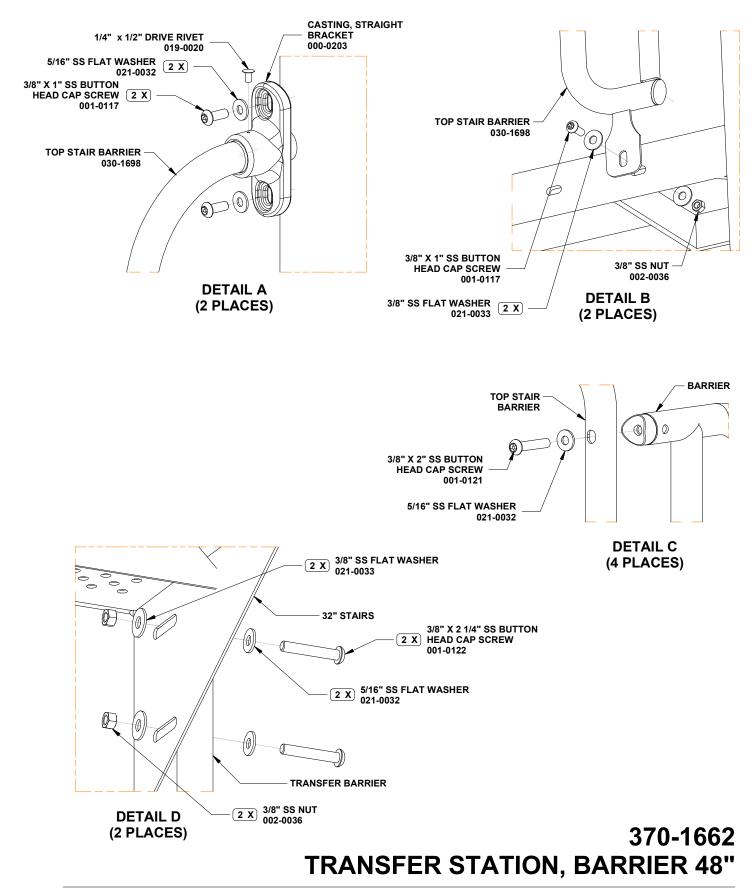
10. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





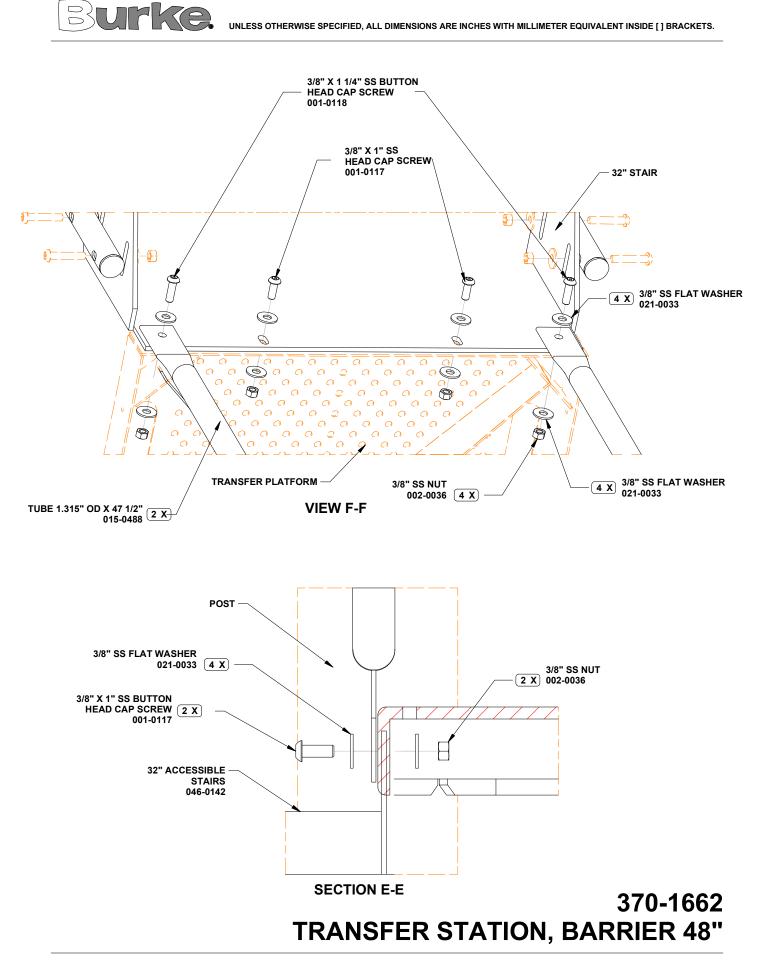






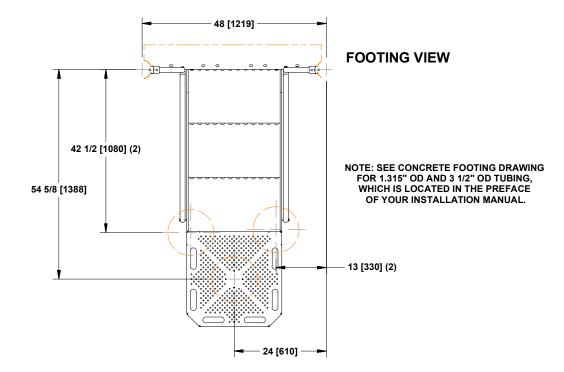
**BCI Burke Company, LLC** 

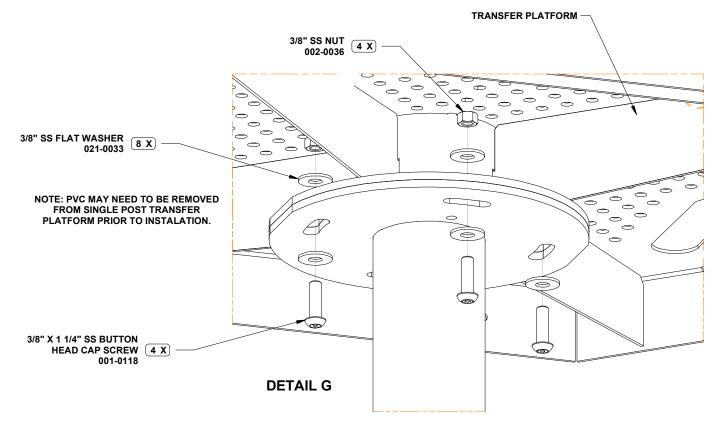
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# 370-1662 TRANSFER STATION, BARRIER 48"

PART NO.	DESCRIPTION	QTY	CA
000-0203	CASTING, STRAIGHT BRACKET	2	Fin
015-0488	TUBE 1.315" OD X 47 1/2"	2	<u>TU</u> finis
030-1698	TOP STAIR BARRIER	2	
030-1707	TRANSFER BARRIER, 32"/40"	2	<u>TO</u>
030-2756	45 1/2" SINGLE POST SUPORT	1	GA
030-2769	SINGLE TRANSFER PLATFORM	1	
036-0819	HARDWARE PACKAGE	1	
036-1509	HARDWARE PACKAGE	1	ste
046-0142	32" ACCESSIBLE STAIRS	1	45 cor mo
			SIN cor and
			<u>HA</u>
			<u>32</u> " cor coa
	ardware package(s) may include extra han ecessary for this installation.	ardware	Sł

#### **SPECIFICATIONS**

<u>CASTING, STRAIGHT BRACKET</u>: A356-T6 Aluminum, Heat- Treated. <sup>F</sup>inished with baked on powder coating.

TUBE 1.315" OD X 47 1/2": 1.315" OD x 12 GA galvanized steel tubing finished with a baked on powder coating.

<u>TOP STAIR BARRIER</u>: One piece all welded construction consisting of 1.315" OD x 12 GA & 1.029" OD x 12 GA galvanized steel tubing and 10 GA galvanized steel plate. Finished with a baked on powder coating.

TRANSFER BARRIER, 32"/40": One piece all welded construction consisting of 1.315" OD x 12 GA steel tubing, and 8 GA galvanized steel plate. Finished with a baked on powder coating.

45 1/2" SINGLE POST SUPPORT: One piece welded construction consisting of 3.5" OD X 11 Ga galvanized tubing and a 1/4" HRS mounting plate finished with a baked-on powder coat.

SINGLE POST TRANSFER PLATFORM: One piece welded construction consisting of 12 GA sheet steel, 1/4" HRS mounting plate and 4 1/2" X 11 Ga steel tubing finished with a PVC dipped coating.

HARDWARE PACKAGE: Stainless steel and aluminum rivets.

<u>32" ACCESSIBLE STAIRS</u>: One piece all welded construction consisting of 12 GA HRPO steel surfaces, sides, and gussets. PVC coated after fabrication.

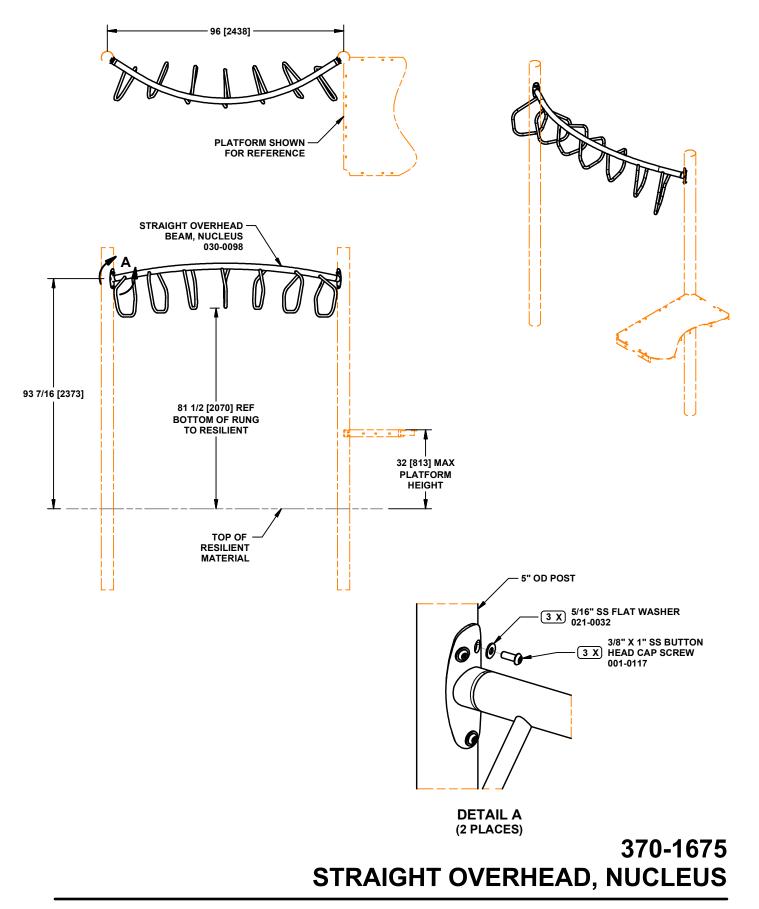
SHIPPING WEIGHT: 272 LBS.

#### INSTALLATION INSTRUCTIONS

### NOTE: Do not tighten hardware until instructed to do so. NOTE: PVC coating may need to be removed from mounting slots of platforms before installation.

- 1. Install PLATFORMS. See appropriate installation instructions.
- 2. Dig footing holes per dimensions shown. See typical concrete footing drawing for 1.315" OD and 3 1/2" OD tubing, which is located in the preface of your installation maual.
- 3. Attach 45 1/2" SINGLE POST SUPPORT to SINGLE POST TRANSFER PLATFORM using hardware specified in DETAIL G.
- 4. Attach both TUBE 1.315" OD x 47 1/2" and SINGLE POST TRANSFER PLATFORM to 32" ACCESSIBLE STAIRS using hardware specified in SECTION VIEW F-F.
- 5. Position 45 1/2" SINGLE POST SUPPORT and TUBE 1.315" OD X 47 1/2" into footing holes. See FOOTING VIEW.
- Attach 32" ACCESSIBLE STAIR to PLATFORM using hardware specifed in SECTION VIEW E-E. NOTE: The heads of the 3/8" x 1" SS BUTTON HEAD CAP SCREWS must be on the platform side of the 32" ACCESSIBLE STAIR.
- 7. Attach both TOP STAIR BARRIERS, and castings, to 5" OD POSTS using hardware specifed in DETAIL A and DETAIL B.
- 8. Attach TRANSFER BARRIERS, 32"/40" to 32" ACCESSIBLE STAIR using hardware specified in DETAIL D.
- 9. Attach TRANSFER BARRIERS, 32"/40" to TOP STAIR BARRIERS using hardware specifed in DETAIL C.
- 10. Tighten all hardware.
- 11. Block up, plumb and level assembly.
- 12. Pour concrete and allow concrete to set for 2-3 days.
- 13. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





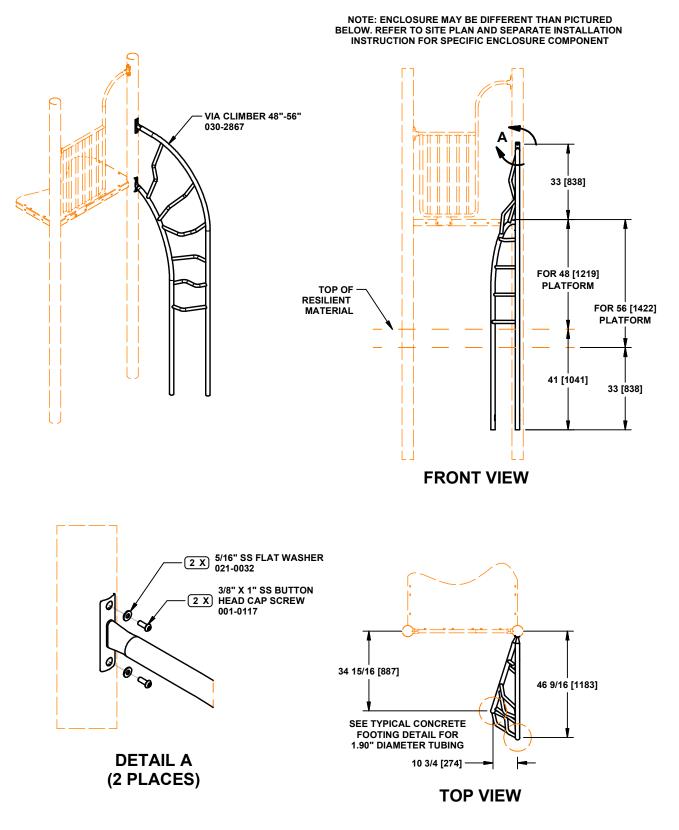
P.O. Box 549 Fond du Lac, WI 54936-0549

	PARTS LIST		SPECIFICATIONS	
PART NO.	DESCRIPTION	<u>QTY</u>	STRAIGHT OVERHEAD BEAM, NUCLEUS: One piece all	
030-0098	STRAIGHT OVERHEAD BEAM, NUCLEUS	1	welded construction consisting of 2 3/8" OD x 10 GA, 2 3/8" O x 12 GA and 1.029" x 14 GA galvanized steel tubing, and 3/16 thick stainless steel. Finished with a baked on powder coating.	;"
036-0258	HARDWARE PACKAGE	3	HARDWARE PACKAGE: Stainless Steel.	
NOTE: Hat is not	ardware package(s) may include extra hard necessary for this installation.	dware	SHIPPING WEIGHT: 53 LBS.	

#### NOTE: Do not tighten hardware until instructed to do so.

- 1. Attach OVERHEAD to posts using hardware specified in DETAIL A. Overhead event should be orientated so that access to the rungs is easiest from the platform or launch pad.
- 2. Plumb posts and level component. Tighten all hardware.
- 3. Pour concrete and let set for 2 to 3 days.
- 4. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



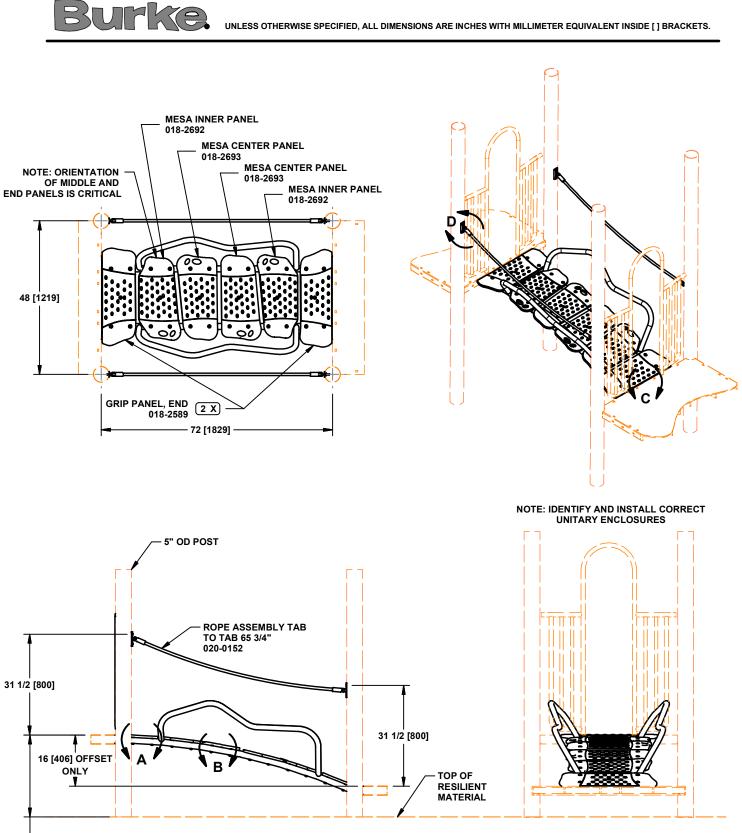


# 370-1696 VIA CLIMBER 48"-56"

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PARTS LIST	]	SPECIFICATIONS
PART NO.         DESCRIPTION           030-2867         VIA CLIMBER 48"-56"           036-0258         HARDWARE PACKAGE	<u>QTY</u>	VIA CLIMBER 48"-56": One piece all welded construction consisting of 1.900" OD X 11 GA galvanized steel side rails, 1.315" OD X 12 GA rungs and an 8 GA galvanized steel mounting plate finished with a baked-on powder coating.
· · · · · ·		HARDWARE PACKAGE: Stainless steel
NOTE: Hardware package(s) may inc	lude extra hardware	
that is not necessary for this installatio	n.	SHIPPING WEIGHT: 68 LBS.

- 1. Dig footing holes per dimensions shown in TOP VIEW. See typical concrete footing detail for 1.900" OD tubing, which is located in the preface of your installation manual.
- 2. Attach VIA CLIMBER to post using hardware specified in DETAIL A.
- 3. Tighten all hardware
- 4. Block up, level and plumb climber. Pour Concrete, let cure for 2-3 days.
- 5. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

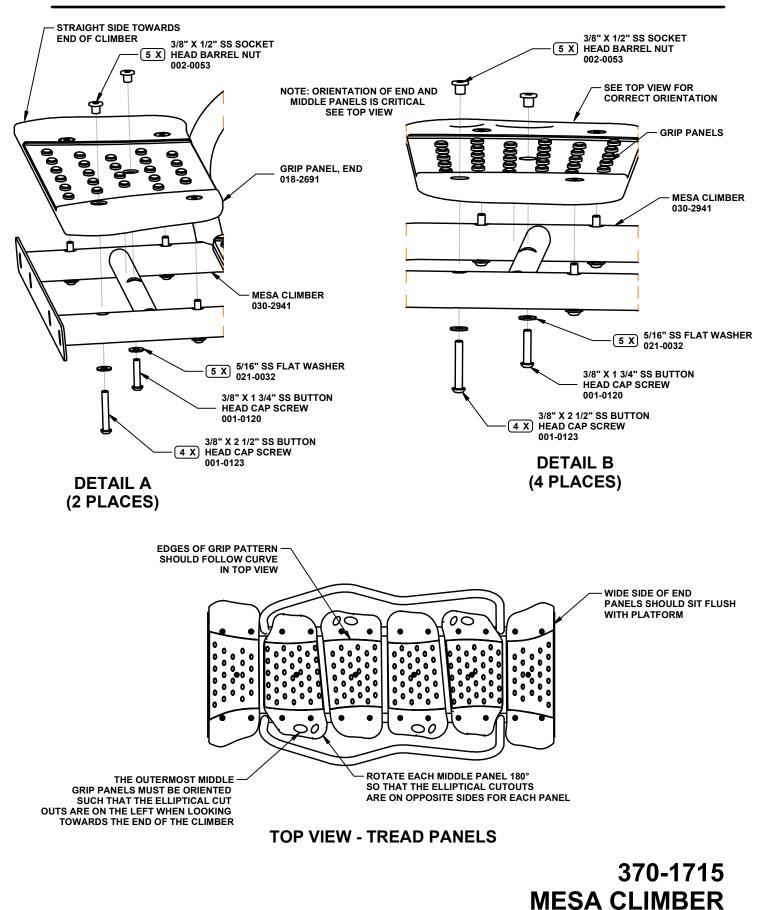


#### SEE SITE PLAN FOR PLATFORM HEIGHT

# 370-1715 MESA CLIMBER



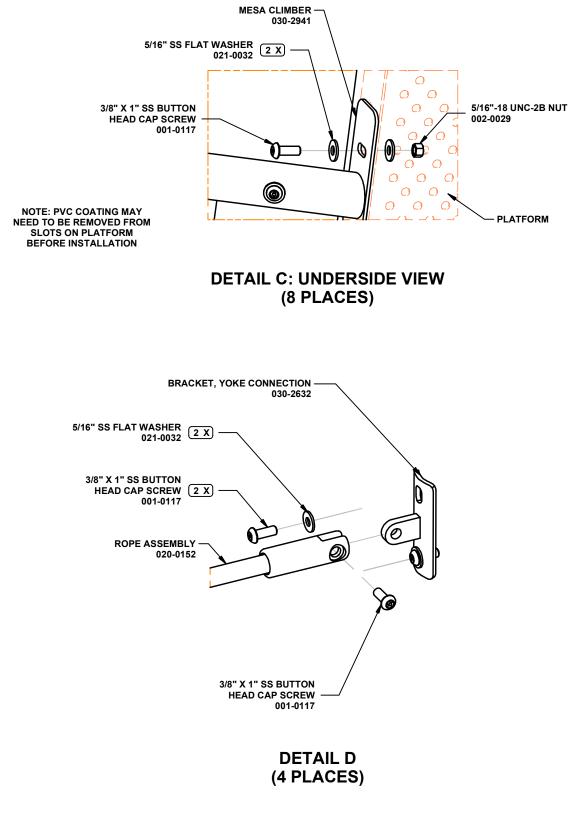
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.



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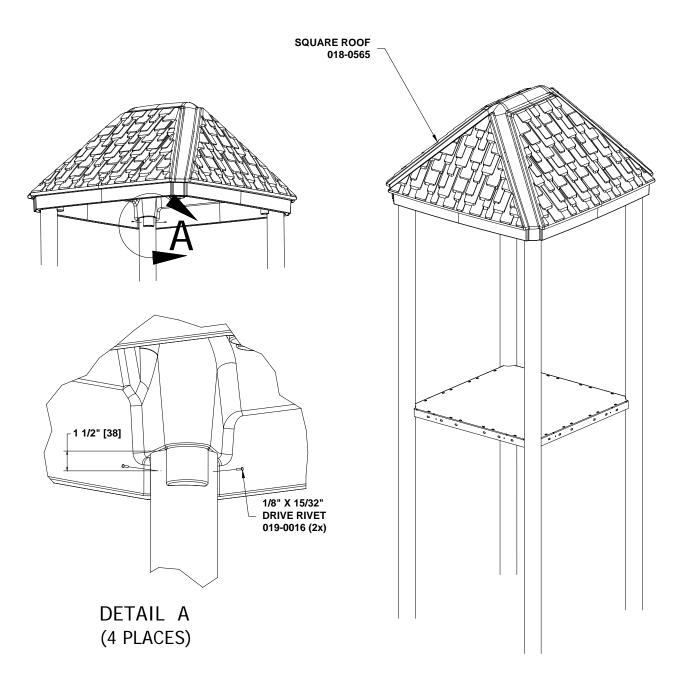


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	PARTS LIST		SPECIFICATIONS
PART NO.	-	<u>QTY</u>	MIDDLE AND END GRIP PANELS: Co-extruded HDPE
018-2589	GRIP PANEL, END	2	MESA CLIMBER: One piece all welded construction consisting
018-2692	MESA PANEL, INNER	2	of 1.900" X 11 GA galvanized steel tubing and 1.660" X 12 GA galvanized steel tubing finished with a baked-on powder
018-2693	MESA PANEL, CENTER	2	coating.
020-0152	ROPE ASSEMBLY, TAB TO TAB, 65 3/4"	2	ROPE ASSEMBLY: 20mm steel core rope and yoke 20mm
030-2632	BRACKET, YOKE CONNECTION	4	ferrule.
030-2941	MESA CLIMBER	1	
036-1560	HARDWARE PACKAGE	1	YOKE CONNECTION: One piece all welded construction consisting of 11 ga. steel and 7 ga. stainless steel formed plate
			with baked-on powder coating.
			HARDWARE PACKAGE: Stainless steel.
			TANDWANE FACINGE. Stainless steel.
NOTE: H	ardware package(s) may include extra har	dware	
	necessary for this installation.		SHIPPING WEIGHT: 143 LBS.
	INSTAL	LATIO	
NOTE: PVC	coating may need to be removed from mo	ountina ha	bles of parts before installation.
	ot tighten hardware until instructed to do		
	GRIP PANEL, END to the MESA CLIMBER		
			n the side closest to the platforms as shown in the TOP VIEW. MESA CLIMBER with hardware specified in DETAIL B.
	ire that the top panels are oriented as sho		-
	SA CLIMBER, 16" OFFSET to platforms usi		
NOTE: Plast	ic grip panels should be flush with platfo	rms, adjus	st if necessary.
		FION and Y	YOKE CONNECTION to posts using hardware specified in DETAIL D.
6. Tighten all			
/ . Install res	silient surfacing material in accordance	to install	tion guidelines, ASTM standards and CPSC guidelines.

370-1715 MESA CLIMBER REV: 01 PCN: 22-0487 7/27/2021





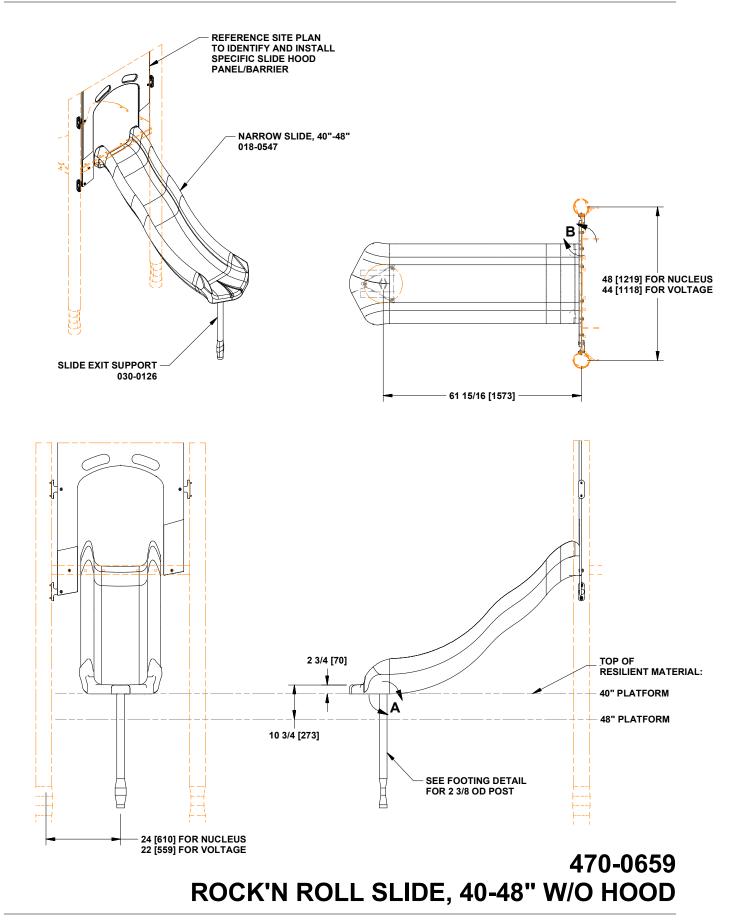


	PARTS LIST			SPECIFICATIONS
PART NO. 018-0565 036-1183	PARTS LIST <u>DESCRIPTION</u> SHAKER SQUARE ROOF HARDWARE PACKAGE	<u>QTY</u> 1 1	ro W <u>H</u>	SPECIFICATIONS SHAKER SQUARE ROOF: 3/16" thick, linear, low density, otationally molded, U.V. stabilized polyethylene with double wall construction. <u>HARDWARE PACKAGE</u> : Aluminum rivets with stainless steel bins.
Note: Hard\ that is not n	ware package(s) may include extra necessary for this installation.	a hardware		SHIPPING WEIGHT: 123 LBS.

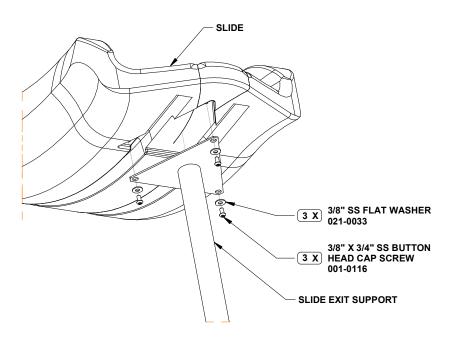
- 1. Determine location of roof to be installed from the site plan, which is located in the preface of your installation manual.
- 2. Insert roof on top of the 5" OD posts, making sure the plastic stubs insert and seat completely inside the post ID.
- 3. Drill (2) 1/8" diameter holes through the post and the roof stub inside the post. These holes should be approximately 1 1/2" down from the top edge of the post. Repeat for each post. See detail A.
- 4. Insert the 1/8" diameter drive rivets, and pound with a hammer to expand and seat the rivets. See detail A.
- 5. Spray drive rivet locations with touch-up paint.
- 6. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



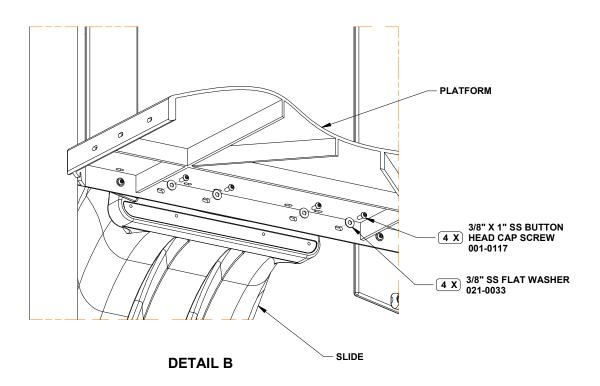
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.







**DETAIL A** 



### 470-0659 ROCK'N ROLL SLIDE, 40-48" W/O HOOD

	PARTS LIST		SPECIFICATIONS
PART NO. 018-0547 030-0126 036-1393	DESCRIPTION NARROW SLIDE, 40"-48" SUPPORT, SLIDE EXIT HARDWARE PACKAGE	QTY 1 1 1	SPECIFICATIONS           NARROW SLIDE, 40"-48"; SLIDE HOOD, NARROW SLIDES: 1/4"           thick, linear, low density, rotationally molded, U.V. stabilized           polyethylene with double wall construction, molded in 3/8" T-nut inserts,           and a textured surface.           SUPPORT, SLIDE EXIT: One piece all welded construction consisting           of 2 3/8" OD x 12 GA galvanized steel tubing and 8 GA galvanized           sheet steel. Finished with a baked on powder coating.           HARDWARE PACKAGE: Stainelss steel.
	ardware package(s) may include extra ha necessary for this installation.	iuware	SHIPPING WEIGHT: 71 LBS.

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

1. After platform and slide hood panel/barrier have been installed, locate and dig footing hole as per dimensions shown. See footing detail drawing, which is located in the preface of your installation manual.

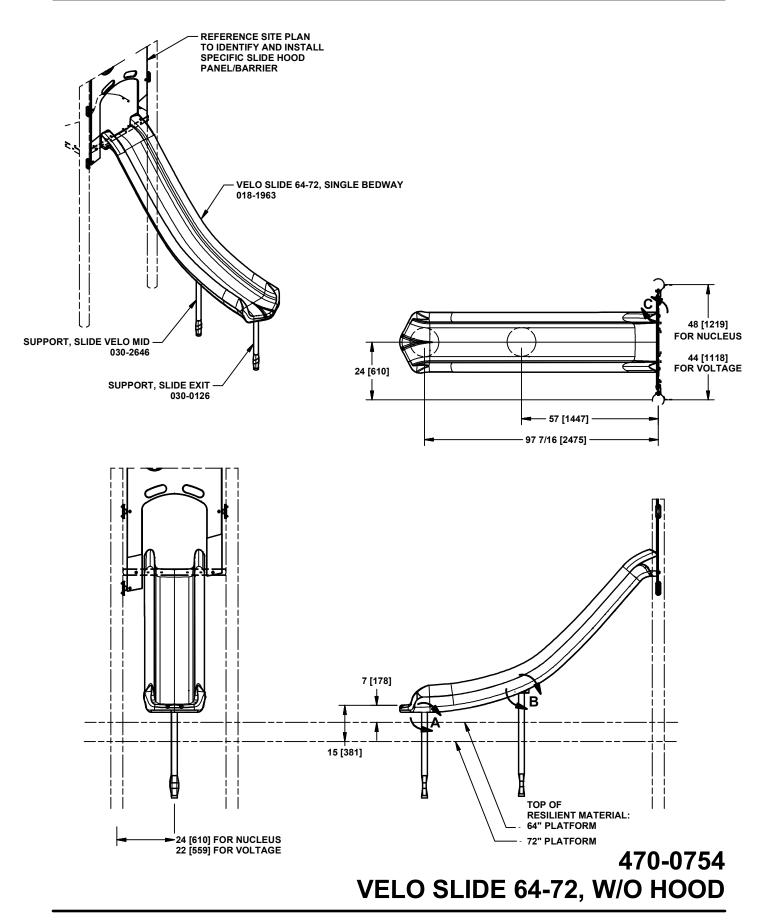
2. Attach SLIDE EXIT SUPPORT to NARROW SLIDE using hardware specified in DETAIL A. Tighten fasteners.

3. Position slide into footing holes. Attach slide to platform using hardware specified in DETAIL B. Make sure that the slide is flush and tight to platform.

- 4. Tighten all hardware.
- 5. Block-up, level and plumb.
- 6. Pour concrete. Let set for two to three days.

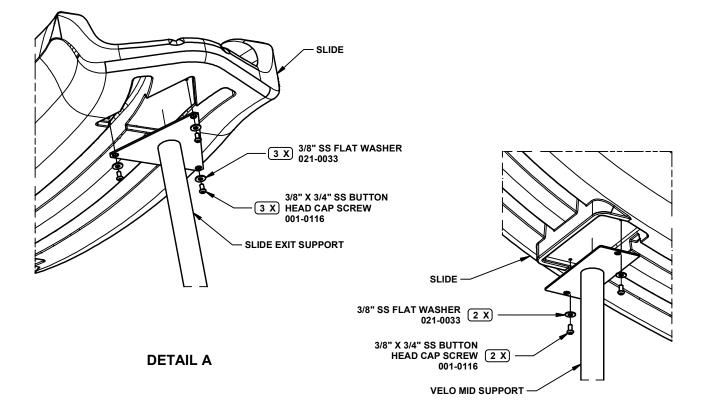
7. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



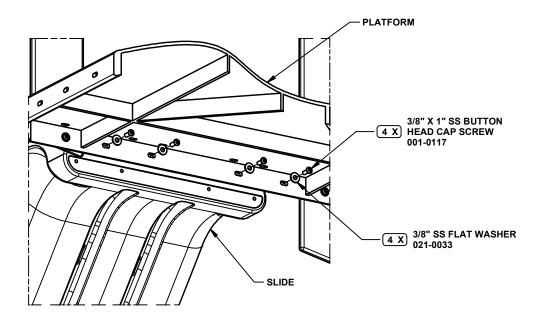


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DETAIL B



**DETAIL C** 

# 470-0754 VELO SLIDE 64-72, W/O HOOD

PARTS LIST		SPECIFICATIONS
PART NO. DESCRIPTION	<u>QTY</u>	VELO SLIDE 64-72, SINGLE BEDWAY: 1/4" thick, linear, low density,
018-1963 VELO SLIDE 64-72, SINGLE BEDWAY	1	rotationally molded, U.V. stabilized polyethylene with double wall construction, molded in 3/8" T-nut inserts, and a textured surface.
030-0126 SUPPORT, SLIDE EXIT	1	
030-2646 SUPPORT, SLIDE VELO MID	1	<u>SUPPORT, SLIDE EXIT</u> : One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and 8 GA galvanized
036-1393 HARDWARE PACKAGE	1	sheet steel. Finished with a baked on powder coating.
		SUPPORT, SLIDE VELO MID: One piece all welded construction consisting of 10 GA galvanized steel plate and 2 3/8" OD x 12 GA galvanized steel tubing. Finished with a baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless steel.
<b><u>NOTE</u></b> : Hardware package(s) may include extra hard that is not necessary for this installation.	ware	SHIPPING WEIGHT: 109 LBS.

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

1. After platform and slide hood panel/barrier have been installed, locate and dig footing hole as per dimensions shown. See footing detail drawing, which is located in the preface of your installation manual.

2. Attach SLIDE EXIT SUPPORT to VELO SLIDE using hardware specified in DETAIL A. Tighten fasteners.

3. Attach SLIDE VELO MID SUPPORT to slide using hardware specified in DETAIL B. Tighten fasteners.

4. Position slide into footing holes. Attach slide to platform using hardware specified in DETAIL C. Make sure that the slide is flush and tight to platform.

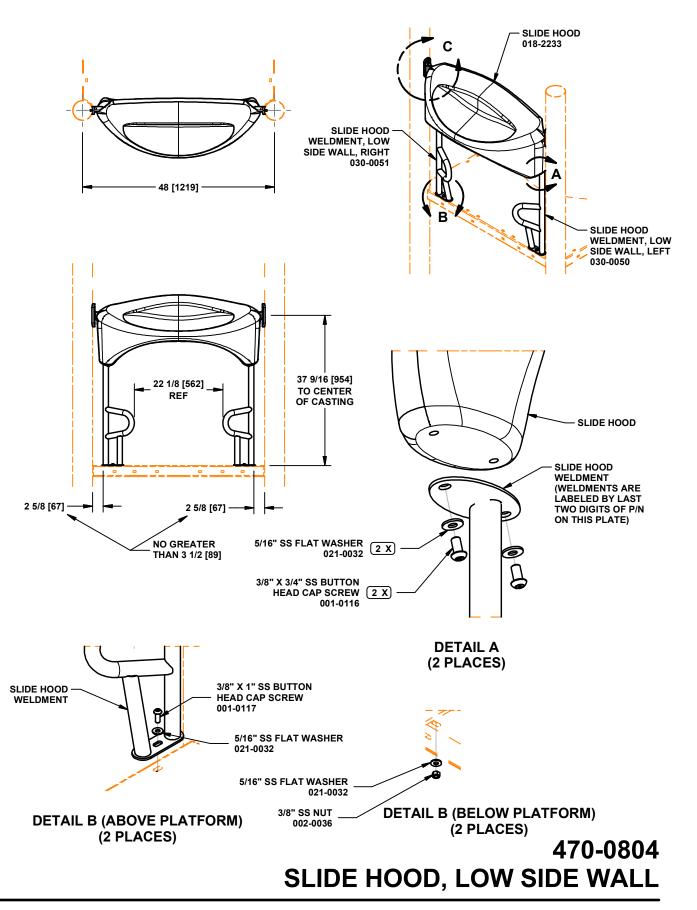
5. Tighten all hardware.

6. Block-up, level and plumb.

7. Pour concrete. Let set for two to three days.

8. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

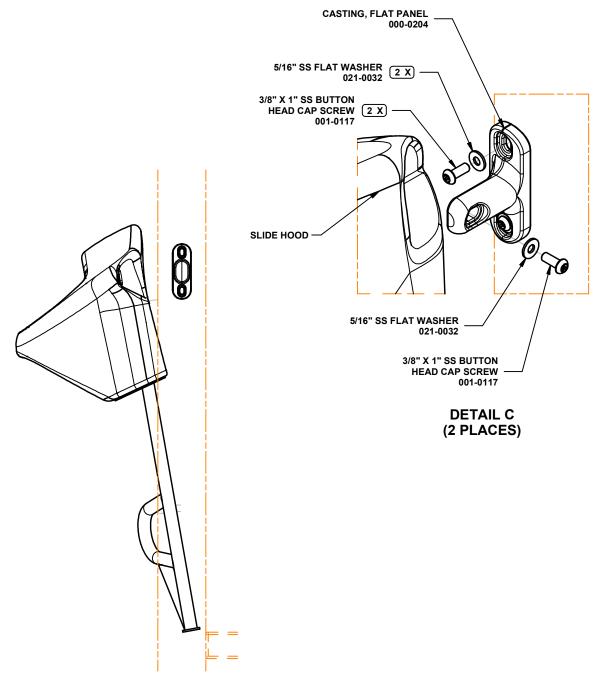




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SIDE VIEW

# 470-0804 SLIDE HOOD, LOW SIDE WALL

	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated. Finished with bat
000-0204	CASTING, FLAT PANEL	2	on powder coating.
018-2233	SLIDE HOOD	1	<u>SLIDE HOOD</u> : Linear, low density rotationally molded, U.V. stabilized, polyethylene, .250" thick, double wall construction. Textured outside surface.
030-0050	SLIDE HOOD WELDMENT, LOW SIDE WALL, LEFT	1	<ul> <li><u>SLIDE HOOD WELDMENT, LOW SIDE WALL, LEFT; SLIDE HOOD WELOW SIDE WALL, RIGHT</u>: One piece all welded construction consisting OD x 12 GA galvanized steel tubing and 8 GA and 10 GA galvanized stee sheeting. Finished with a baked on powder coating.</li> <li><u>HARDWARE PACKAGE; HARDWARE PACKAGE; HARDWARE PACKAGE</u></li> </ul>
030-0051	SLIDE HOOD WELDMENT, LOW SIDE WALL, RIGHT	1	
036-0040	HARDWARE PACKAGE	2	Stainless steel.
036-0784	HARDWARE PACKAGE	1	
036-2006	HARDWARE PACKAGE	1	
	ardware package(s) may include extra hard necessary for this installation.	lware	SHIPPING WEIGHT: 31 LBS.

NOTE: Do not tighten hardware until instructed to do so.

1. Attach SLIDE HOOD WELDMENT, LOW SIDE WALL, LEFT and SLIDE HOOD WELDMENT, LOW SIDE WALL, RIGHT to SLIDE HOOD using hardware specified in DETAIL A. Tighten hardware.

2. Loosely fasten slide hood weldment to platform using hardware specified in DETAIL B.

3. Tilt the hood assembly out of the way and attach CASTING, FLAT PANEL using hardware in DETAIL C.

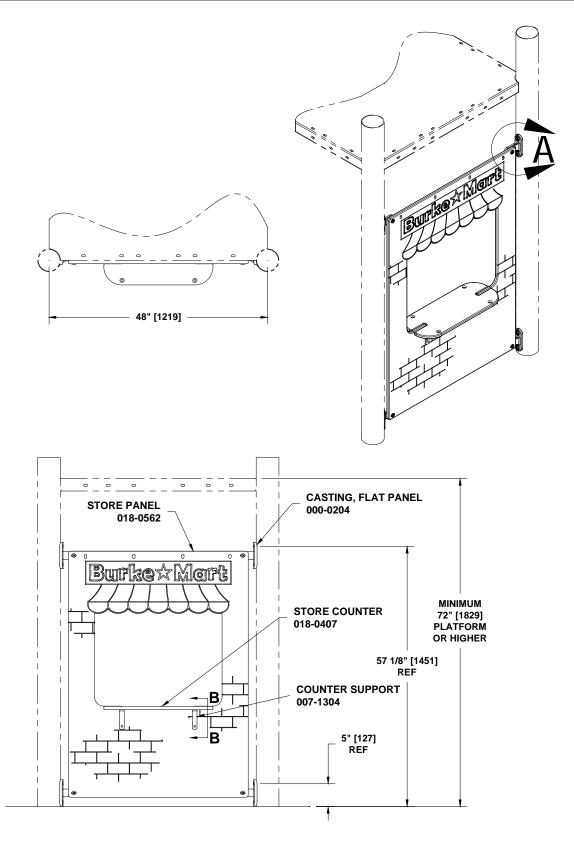
4. Tilt the hood assembly into position, against the castings, and align the slot of the casting and the nut insert of the slide hood.

Hold the casting in position, move the hood out of the way, and then tighten hardware connecting the casting to the post.

5. Attach the slide hood assembly to the castings using the remaining hardware in DETAIL C.

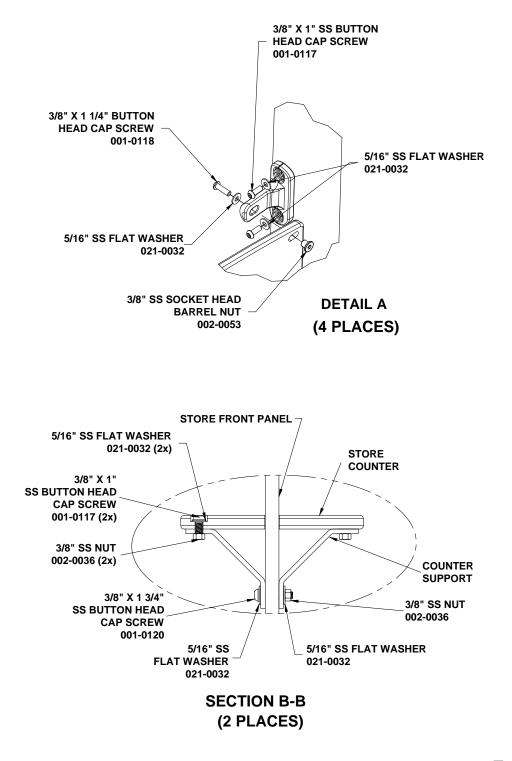
6. Tighten all hardware.





# 570-0620 BURKE MART PANEL BELOW PLATFORM 72"-112"

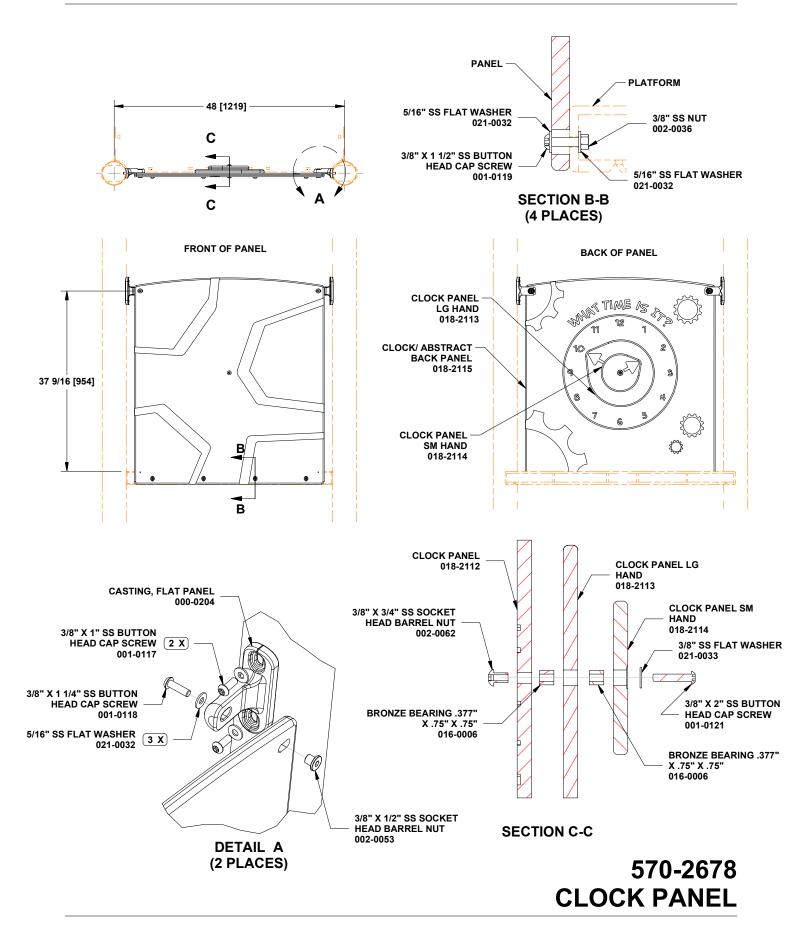




570-0620 BURKE MART PANEL BELOW PLATFORM 72"-112"

PART NO. 000-0204 007-1304 018-0407 018-0562 036-1245	PARTS LIST DESCRIPTION CASTING, FLAT PANEL COUNTER SUPPORT STORE COUNTER BURKE MART PANEL HARDWARE PACKAGE	<u>QTY</u> 4 1 1	SPECIFICATIONS         CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.         Finished with baked on powder coating.         COUNTER SUPPORT: Formed 8 GA. galvanized sheet steel         finished with a baked on powder coating.         STORE COUNTER: 3/4" extruded HDPE.         BURKE MART PANEL: 3/4" co-extruded HDPE.         HARDWARE PACKAGE: Stainless steel
Note: Hard that is not r	ware package(s) may include extra have extra h	ardware	SHIPPING WEIGHT: 54 I BS
Note: Hardy that is not r	ware package(s) may include extra hate extra	ardware	SHIPPING WEIGHT: 54 LBS.
Note: Hardy that is not r	necessary for this installation.		SHIPPING WEIGHT: 54 LBS.
Note: Hardy that is not r	necessary for this installation.		
that is not r	necessary for this installation.	FALLATION I	
that is not r NOTE: Do n 1. Attach a	INS	TALLATION I d to do so. osts using 3/8" x 1	I" SS button head cap screws and 5/16" SS flat washers. <b>NOTE:</b>
NOTE: Do n 1. Attach a flat pan 2. Attach S	INS INS Not tighten hardware until instructe all four CASTINGS FLAT PANEL to p rel casting must be positioned so in	TALLATION I d to do so. osts using 3/8" x 1 t is offset towards	I" SS button head cap screws and 5/16" SS flat washers. <b>NOTE:</b>
<ul> <li>that is not r</li> <li>NOTE: Do n</li> <li>1. Attach a flat pan</li> <li>2. Attach S socket h</li> <li>3. Attach C nuts. Se</li> <li>4. Slide ST counter</li> </ul>	INS not tighten hardware until instructe all four CASTINGS FLAT PANEL to p nel casting must be positioned so it STORE PANEL to flat panel castings nead barrel nuts. See DETAIL A. COUNTER SUPPORTS to store panel se SECTION B-B. FORE COUNTER into slot on store from using 3/8" x 1" SS button head cap s	TALLATION I d to do so. osts using 3/8" x 1 t is offset toward using 3/8" x 1 1/4" el using 3/8" x 1 3/4 ont panel with cou crews, 5/16" flat w	I" SS button head cap screws and 5/16" SS flat washers. NOTE: s platform. See DETAIL A.



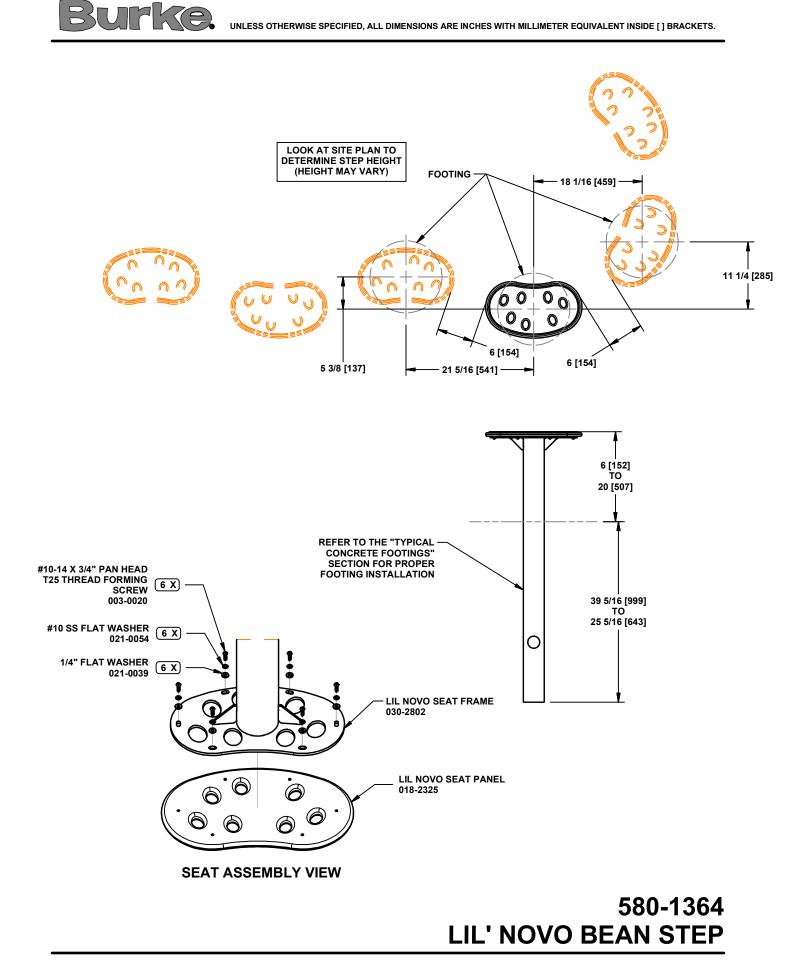


	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	QTY	CASTING, FLAT PANEL: A356-T6 Aluminum, Heat-Treated.
000-0204	CASTING. FLAT PANEL	2	Finished with baked on powder coating.
016-0006	BRONZE BEARING .377" X .75" X .75"	2	
018-2113	CLOCK PANEL LG HAND	1	BRONZE BEARING .377" X .75" X .75": Oil impregnated, bronze.
018-2114	CLOCK PANEL SM HAND	1	
018-2115	CLOCK/ ABSTRACT BACK	1	CLOCK PANEL LG HAND; CLOCK PANEL SM HAND;
036-0844	HARDWARE PACKAGE	1	CLOCK/ ABSTRACT BACK PANEL: 3/4" co-extruded HDPE.
036-0880	HARDWARE PACKAGE	1	HARDWARE PACKAGE; HARDWARE PACKAGE;
036-1230	HARDWARE PACKAGE	1	HARDWARE PACKAGE; HARDWARE PACKAGE:
036-2022	HARDWARE PACKAGE	1	Stainless steel.
NOTE: Ha	ardware package(s) may include extra hard	dware	
	necessary for this installation.		SHIPPING WEIGHT: 49 LBS.

NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of Panel assembly.
- 2. Attach FLAT PANEL CASTINGS to posts using 3/8" X 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- Attach PANEL to platform using 3/8" X 1 1/2" SS button head cap screws, 5/16" SS flat washers and 3/8" SS nuts. See SECTION B-B.
- 4. Attach CLOCK PANEL SM HAND and CLOCK PANEL LG HAND to CLOCK PANEL using BRONZE BEARING .377" X .75" X .75", 3/8" X 3/4" SS socket head barrel nut, 3/8" X 2" SS button head cap screw, and 3/8" SS flat washer. See SECTION C-C.
- 5. Level panel assembly and tighten all hardware, make sure wheel spins freely.
- 6. Install resilient material accordance to installation guidelines, ASTM standards and CPSC guidlines.



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	PARTS LIST =		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	LIL NOVO SEAT PANEL: 3/4" Co-Extruded HDPE
018-2325	LIL NOVO SEAT PANEL	1	LIL NOVO SEAT FRAME: One piece all welded construction
030-2802	LIL NOVO SEAT FRAME	1	consisting of 3.5" OD x 11 GA galvanized tubing, 8 GA
036-2008	HARDWARE PACKAGE	2	galvanized steel sheeting, and 1/4" zinc-chromated HR steel sheeting. Finished with a baked on powder coating.
			HARDWARE PACKAGE: Stainless Steel and Zinc-Plated Steel.
<u>NOTE:</u> Ha that is not	ardware package(s) may include necessary for this installation.	extra hardware	SHIPPING WEIGHT: 27 LBS.

#### NOTE: Do not over-tighten hardware.

1. Locate and dig footing hole per dimensions given and site plan. See typical concrete footing details, which are located in the preface of this installation manual.

- 2. Attach the LIL NOVO SEAT PANEL to the LIL NOVO SEAT FRAME using hardware as specified in SEAT ASSEMBLY VIEW.
- 3. Place assembly into footing hole. Block-up, plumb, and level seat.
- 4. Pour concrete. Allow concrete to set for 2-3 days.

5. If installed in a play area within the use zone of play equipment, then install resilient material in accordance to installation guidelines, ASTM standards, and CPSC guidelines.



Order Number
Job Name
Structure Number

### **GENERAL CONFORMITY CERTIFICATION**

As required by the Consumer Product Safety Improvement Act of 2008, Public Law 110-314 122 Stat. 3016 (August 14, 2008) H.R. 4040

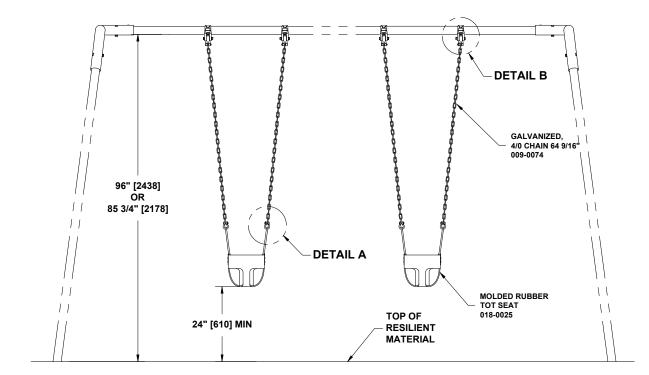
- 1. This Certification of Compliance covers the playground components sold on Order #\_\_\_\_, identified as Proposal #\_\_\_\_.
- 2. This Certification of Compliance certifies that the products identified in item 1 comply with all rules, bans, standards or regulations applicable to the product under the Consumer Product Safety Improvement Act of 2008; Sections 101, 102, 103 and 108.
- 3. Manufacturer certifying compliance of the products:

BCI Burke Company, LLC 660 Van Dyne Road Fond du Lac, WI 54935 (920) 921-9220

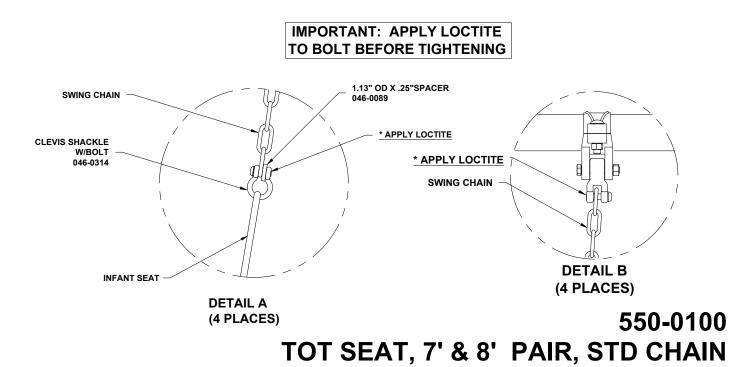
4. The contact information for the individual maintaining records of the test results is as follows: Wayne Orvold

BCI Burke Company, LLC 660 Van Dyne Road Fond du lac, WI 54935 (920) 921-9220 Worvold@bciburke.com

- 5. These products were manufactured for shipment on \_\_\_\_\_.
- 6. This General Conformity Certification and certification of compliance is based on testing completed through a reasonable testing program (ISO WI 028-08) maintained at the manufacturer listed above.
- The testing for this certificate was completed at: Applied Technical Services, Incorporated 1049 Triad Coart Marietta, GA 30062 (770) 423-1400



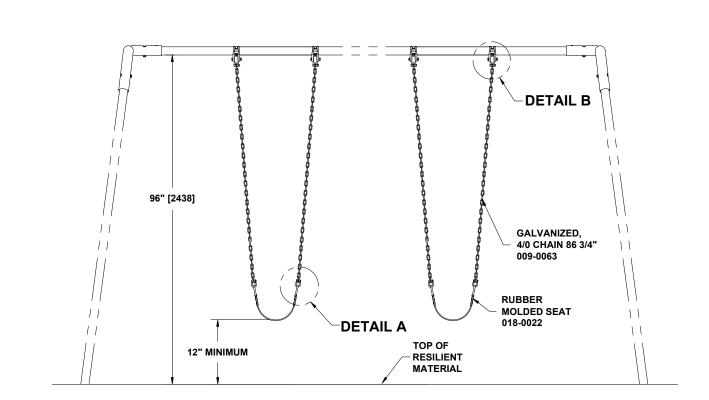
SWING SEAT HEIGHT REQUIREMENTS CUT CHAIN OFF THE TOP, TO ATTAIN 24" MINIMUM SEAT HEIGHT, MAKE SURE TO CUT EQUAL AMOUNTS OFF BOTH CHAINS.



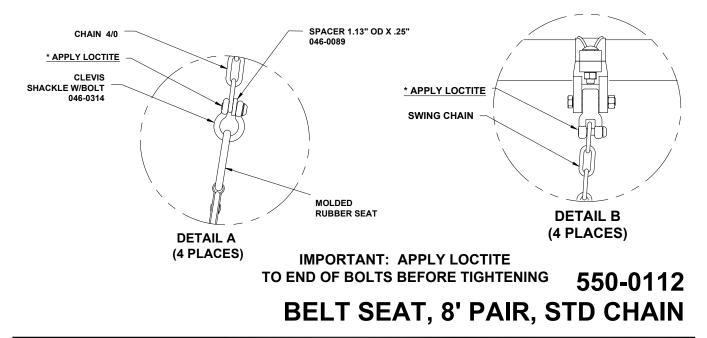
	PARTS LIST		SPECIFICATIONS
PART NO. 009-0074 018-0025 046-0089 046-2197 046-0314	PARTS LIST DESCRIPTION GALVANIZED, 4/0 CHAIN 64 9/16" MOLDED RUBBER TOT SEAT SPACER 1.13" OD X .25" LOCTITE CLEVIS SHACKLE W/BOLT	QTY 4 2 4 1 4	<ul> <li><u>GALVANIZED, 4/0 CHAIN 64 9/16"</u>: 3/8" diameter, 4/0 straight coil chain.</li> <li><u>MOLDED RUBBER TOT SEAT</u>: Molded rubber, reinforced with a steel insert. Riveted galvanized attachment hardware.</li> <li><u>SPACER 1.13" OD X .25"</u>: 1/4" Nylatron GS.</li> <li><u>LOCTITE</u>: Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and</li> </ul>
Note: Hardw	vare package(s) may include extra hardv	vare	cumene hydroperoxide. <u>CLEVIS SHACKLE W/BOLT</u> : 5/16" Shackle with a 3/8" X 1 1/2" bolt.
	ecessary for this installation.	Varo	SHIPPING WEIGHT: 24 LBS.

#### INSTALLATION INSTRUCTIONS

- Unscrew bolt on swing hanger and attach swing CHAIN 4/0 to swing hanger. Apply LOCTITE to all bolts on hangers before tightening. See DETAIL B.
- 2. Unscrew bolt in CLEVIS SHACKLE and slide shackles onto both sides of MOLDED RUBBER SEAT. See DETAIL A.
- 3. Determine what length to cut the chains. Attach the seat to the chains with SPACER and shackle at your desired height. Note there must be a minimum of 24" between the underside of the seat and the top of the resilient material.
- 4. With the seats at the desired heights and also attaining the 24" minimum clearance, cut and remove the excess chain. Make sure to cut the same length off each chain so that the seat remains level. Apply loctite to all shackle bolts and tighten.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



#### SWING SEAT HEIGHT REQUIREMENTS CUT CHAIN OFF THE TOP, TO ATTAIN 12" MINIMUM SEAT HEIGHT, MAKE SURE TO CUT EQUAL AMOUNTS OFF BOTH CHAINS.

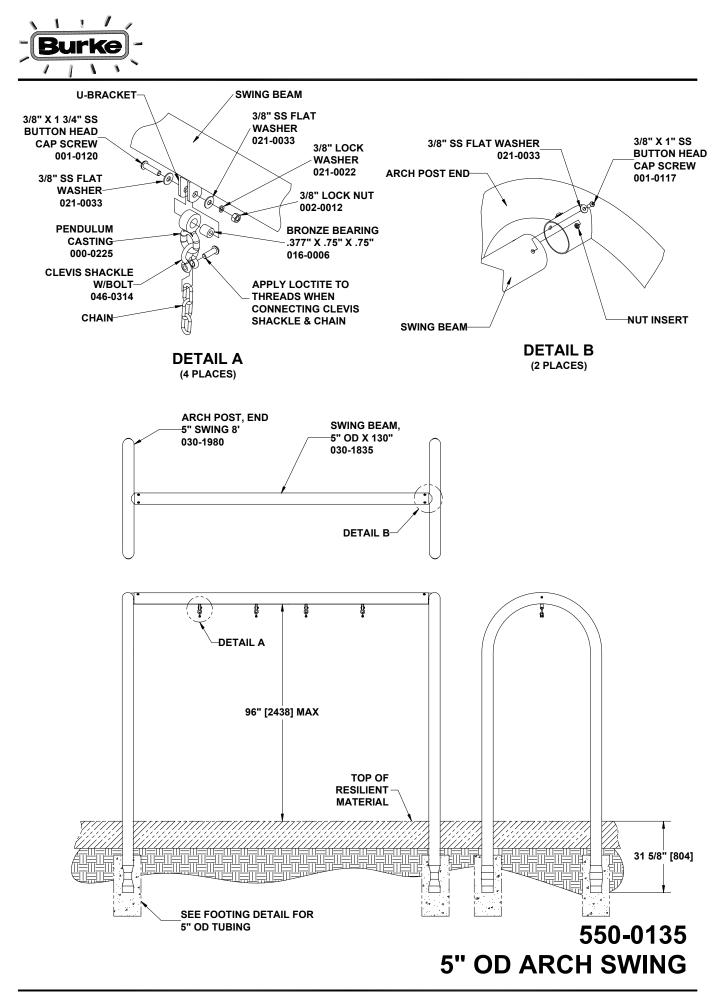


	PARTS LIST		SPECIFICATIONS
PART NO. 009-0063 018-0022 046-089 046-2197 046-0314	GALVANIZED 4/0 CHAIN 86 3/4" MOLDED RUBBER SEAT SPACER 1.13" OD X .25" LOCTITE CLEVIS SHACKLE W/BOLT	QTY 4 1 4	GALVANIZED 4/0 CHAIN 86 3/4": 3/8" diameter, 4/0 straight coil chain.         MOLDED RUBBER SEAT: Molded rubber, reinforced with a steel insert. Riveted galvanized attachment hardware.         SPACER 1.13" OD X .25": 1/4" Nylatron GS.         LOCTITE: Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and cumene hydroperoxide.         CLEVIS SHACKLE W/BOLT: 5/16" Shackle with a 3/8" X 1 1/2" bolt.
	ware package(s) may include extra hard ecessary for this installation.	ware	SHIPPING WEIGHT: 20 LBS.

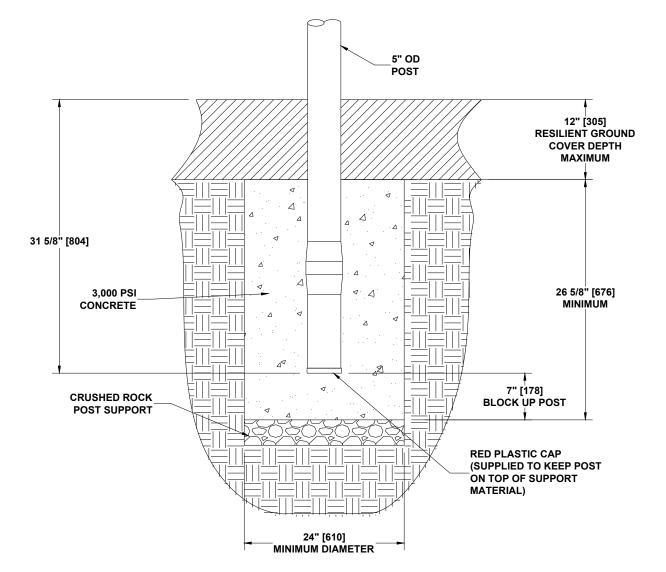
#### INSTALLATION INSTRUCTIONS

- 1. Unscrew bolt on swing hanger and attach swing CHAIN 4/0 to swing hanger. Apply LOCTITE to all bolts on hangers before tightening. See DETAIL B.
- 2. Unscrew bolt in CLEVIS SHACKLE and slide shackles onto both sides of MOLDED RUBBER SEAT. See DETAIL A.
- 3. Determine what length to cut the chains. Attach the seat to the chains with SPACER and shackle at your desired height. Note there must be a minimum of 12" below the seat between the underside of the seat and the top of the resilient material. When measuring, the seat must be pulled down as if someone were sitting in it and the resilient material must be at it's finished depth.
- 4. With the seats at the desired heights and also attaining the 12" minimum clearance, cut and remove the excess chain. Make sure to cut the same length off each chain so that the seat remains level. Apply loctite to all shackle bolts and tighten.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

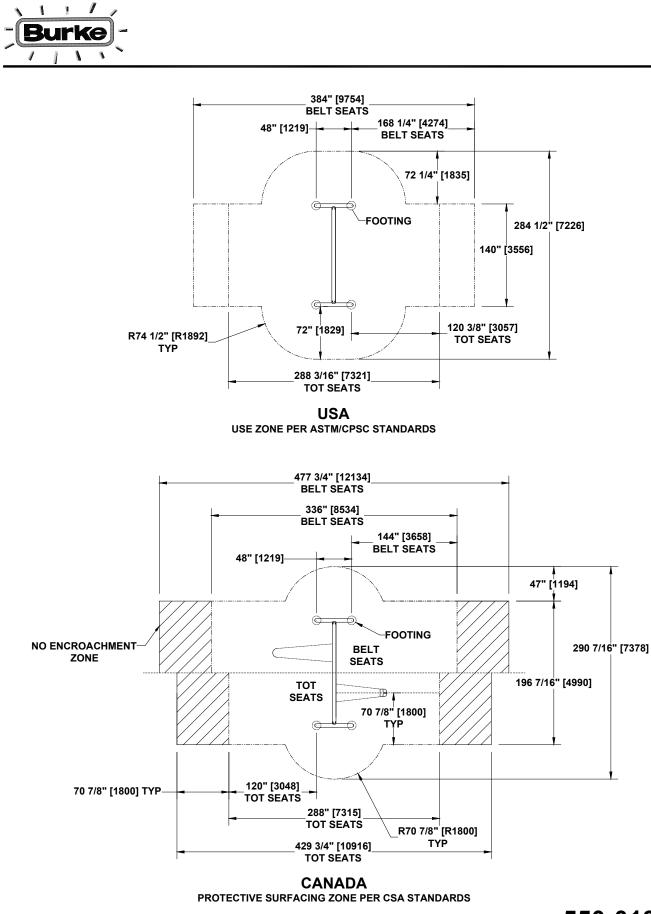
550-0112.doc Description: BELT SEAT, 8' PAIR, STD CHAIN REV: 02 PCN: 23-0007 1/16/2023







550-0135 5" OD ARCH SWING

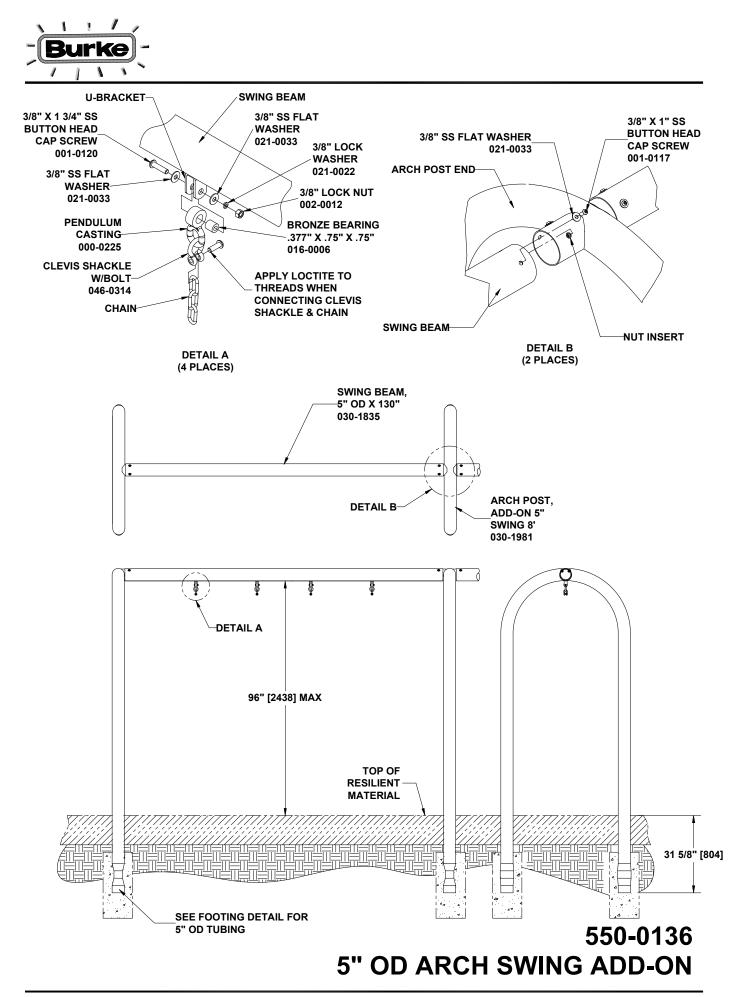


550-0135 5" OD ARCH SWING

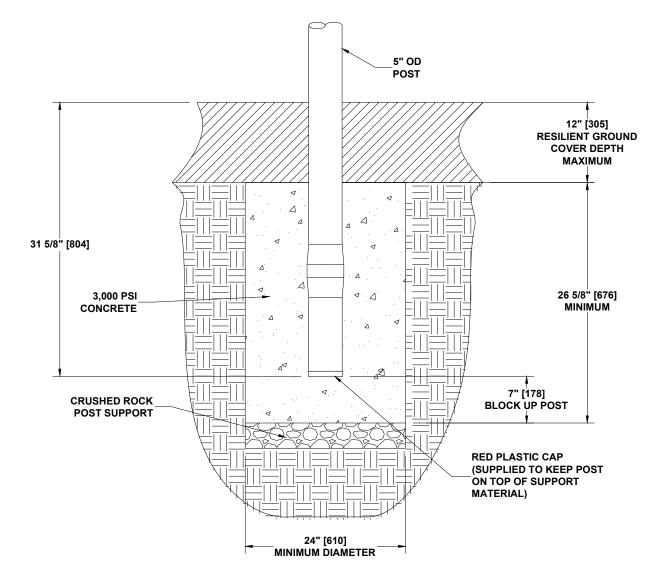
	PARTS LIST		SPECIFICATIONS
PART NO. 000-0225 016-0006 030-1835 030-1980	DESCRIPTION PENDULUM CASTING BRONZE BEARING .377" X .75" X .75" SWING BEAM, 5" OD X 130" ARCH POST END, 5" OD SWING	QTY 4 4 1 2	PENDULUM CASTING: Galvanize plated, grade 32510, malleable iron         BRONZE BEARING .377" X .75" X .75": Oil impregnated, bronze.         SWING BEAM, 5" OD X 130": One piece all welded construction consisting of 5" OD x 11 GA galvanized steel tubing and 8 GA
036-0227 036-0788 036-1414 046-2197	HARDWARE PACKAGE HARDWARE PACKAGE HARDWARE PACKAGE LOCTITE	1 2 1 1	<ul> <li><u>ARCH POST END, 5" OD SWING</u>: One piece all welded construction consisting of 5" OD x 11 GA &amp; 11/16" OD low carbon steel bar and 4 1/2" OD x 11 GA steel tubing w/cadmium and yellow chromate plating, and an assembly of 3/8" nut inserts. Finished with a baked on powder coating.</li> <li><u>HARDWARE PACKAGE</u>: Stainless steel.</li> </ul>
			HARDWARE PACKAGE: 5/16" Shackle with a 3/8" X 1 5/32" bolt. HARDWARE PACKAGE: Stainless steel washers & screws and
			zinc plated steel lock nuts & washers. <u>LOCTITE</u> : Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and cumene hydroperoxide.
	vare package(s) may include extra hard ecessary for this installation.	ware	SHIPPING WEIGHT: 367 LBS.

#### INSTALLATION INSTRUCTIONS

- 1. Determine 5" OD post locations per dimensions shown.
- 2. Dig footing holes. See typical concrete footing drawing for 5" OD posts, which is located in the preface of the installation manual.
- 3. Attach 5" OD x 130" SWING BEAM to both ARCH POST, END 5" OD SWING by sleeving the swing beam over arch post stub and fasten using 3/8" X 1" SS button head cap screws. Tighten hardware. See DETAIL B.
- 4. Position frame into footing holes. Block up, plumb, and level frame.
- 5. Pour concrete and allow it to set for 2 to 3 days.
- 6. Insert BRONZE BEARING .377" X .75" X .75" into PENDULUMS and attach to swing beam as shown in DETAIL A. Tighten hardware.
- 7. Attach swing chain to pendulum using CLEVIS SHACKLE W/ BOLT. Tighten hardware. See DETAIL A.
- 8. INSTALL RESILIENT SURFACING MATERIAL.

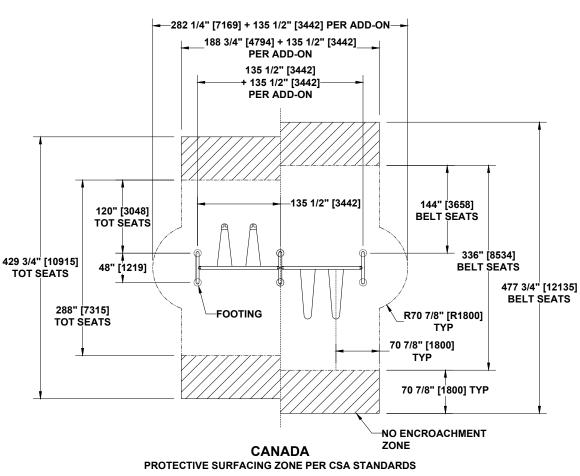




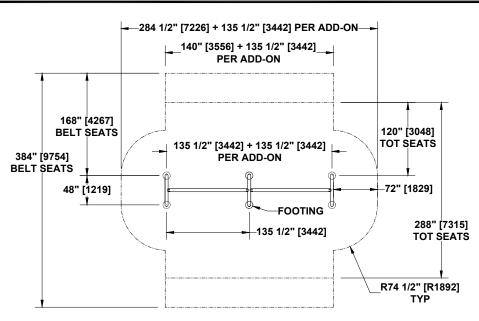


550-0136 5" OD ARCH SWING ADD-ON

## 550-0136 5" OD ARCH SWING ADD-ON









DADTNO			SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	PENDULUM CASTING: Galvanize plated, grade 32510,
000-0225		4	malleable iron
016-0006	BRONZE BEARING .377" X .75" X .75"	4	BRONZE BEARING .377" X .75" X .75": Oil impregnated, bronze.
030-1835	SWING BEAM, 5" OD X 130"	1	SWING REAM 5" OD X 120" One piece all wolded construction
030-1981	ARCH POST, ADD-ON 5" OD SWING	1	<u>SWING BEAM, 5" OD X 130"</u> : One piece all welded construction consisting of 5" OD x 11 GA galvanized steel tubing and 8 GA
036-0227 036-0788	HARDWARE PACKAGE HARDWARE PACKAGE	1 2	galvanized steel plate. Finished with a baked on powder coating.
036-1414	HARDWARE PACKAGE	1	ARCH POST, ADD-ON 5" OD SWING: One piece all welded
046-2197	LOCTITE	1	construction consisting of 5" OD x 11 GA & 3/8" Schedule 40
			galvanized steel pipe and 4 1/2" OD x 11 GA steel tubing
			w/cadmium and yellow chromate plating, and an assembly of 3/8" nut inserts. Finished with a baked on powder coating.
			nut inserts. I misned with a baked on powder coating.
			HARDWARE PACKAGE: Stainless steel.
			HARDWARE PACKAGE: 5/16" Shackle with a 3/8" X 1 5/32"
			bolt.
			HADDWARE DACKACE: Steinlass steel weekers & service and
			HARDWARE PACKAGE: Stainless steel washers & screws and zinc plated steel lock nuts & washers.
			<u>LOCTITE</u> : Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate,
			polyglycol oleate propylene clycol, titanium dioxide, and cumene
			hydroperoxide.
	vare package(s) may include extra hardwa	are	
that is not ne	ecessary for this installation.		SHIPPING WEIGHT: 224 LBS.

#### INSTALLATION INSTRUCTIONS

- 1. Determine 5" OD post locations per dimensions shown.
- 2. Dig footing holes. See typical concrete footing drawing for 5" OD posts, which is located in the preface of the installation manual.
- 3. Attach 5" OD x 130" SWING BEAM to arch post end and ARCH POST, ADD-ON 5" SWING 8' by sleeving the swing beam over arch post and fasten using 3/8" X 1" SS button head cap screws. Tighten the hardware. See DETAIL B.
- 4. Position frame into footing holes. Block up, plumb, and level frame.
- 5. Pour concrete and allow it to set for 2 to 3 days.
- 6. Insert BRONZE BEARING .377" X .75" X .75" into PENDULUMS and attach to swing beam as shown in DETAIL A. Tighten hardware.
- 7. Attach swing chain to pendulum using CLEVIS SHACKLE W/ BOLT. Tighten hardware. See DETAIL A.
- 8. INSTALL RESILIENT SURFACING MATERIAL.



Order Number
Job Name
Structure Number

#### **GENERAL CONFORMITY CERTIFICATION**

As required by the Consumer Product Safety Improvement Act of 2008, Public Law 110-314 122 Stat. 3016 (August 14, 2008) H.R. 4040

- 1. This Certification of Compliance covers the playground components sold on Order #\_\_\_\_, identified as Proposal #\_\_\_\_.
- 2. This Certification of Compliance certifies that the products identified in item 1 comply with all rules, bans, standards or regulations applicable to the product under the Consumer Product Safety Improvement Act of 2008; Sections 101, 102, 103 and 108.
- 3. Manufacturer certifying compliance of the products:

BCI Burke Company, LLC 660 Van Dyne Road Fond du Lac, WI 54935 (920) 921-9220

4. The contact information for the individual maintaining records of the test results is as follows: Wayne Orvold

BCI Burke Company, LLC 660 Van Dyne Road Fond du lac, WI 54935 (920) 921-9220 Worvold@bciburke.com

- 5. These products were manufactured for shipment on \_\_\_\_\_.
- 6. This General Conformity Certification and certification of compliance is based on testing completed through a reasonable testing program (ISO WI 028-08) maintained at the manufacturer listed above.
- The testing for this certificate was completed at: Applied Technical Services, Incorporated 1049 Triad Coart Marietta, GA 30062 (770) 423-1400

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# SITE PLAN & FOOTING PLAN DRAWINGS ARE LOCATED IN THE BACK OF THE MANUAL ALONG WITH ORDER DOCUMENTATION.

## **INTRODUCTION**

#### Congratulations on your purchase of Burke playground equipment!

A tremendous amount of care, quality and workmanship went into the design and manufacture of your equipment. Now is the time when your part of the teamwork really begins.

Following are a few topics vital to the maintenance of your playground and - most importantly - minimizing your problems in the field.

- All equipment <u>must</u> be installed per Burke Installation Guidelines and Specifications. Detailed prints and instructions are included in the back of this manual, arranged in numerical order by the component number which can be found on the site plan drawings which are at the very end of this manual.
- Don't forget to add a proper safety surface, as recommended by CPSC Guidelines for Public Playground Equipment and ASTM- F 1487 Standards or CSA/CAN Z614 Standards.
- It is critical to the long life of your equipment to establish a routine maintenance program. To help you, enclosed is a checklist including frequency for inspection based on recommendations of the CPSC Guidelines for Public Playground Equipment.

If your playground has been installed in atmospheric conditions of high salt content, i.e. near the ocean, the chance for corrosion is much more likely. Therefore, frequent checks are highly recommended.

Your equipment has arrived in great shape. **Protect your Warranty - equipment maintenance is up to you.** 

We are here to help you with any questions or concerns you may have about your equipment. Please feel free to call our Toll Free 1-800 number.

#### Thank you for your business.

#### **BCI Burke Company, LLC**

For questions, call us at: **1-800-356-2070** 

This installation manual is applicable to the following playground equipment: Nucleus®, Voltage®, Intensity®, NaturePlay®, Circuit Play®, Circuit Play Beginnings®, Little Buddies® and Burke Basics

## **SUPERVISION**

Playgrounds should be supervised at all times when children are using them. Supervisors and parents should use sound judgment in preventing overcrowding on equipment, or the use of play apparatus whose challenge exceeds the user's capabilities. Parents and adult supervisors should instruct children on the safe use of playground equipment. Intensive classroom and home instruction about safe behavior on playground equipment make an important contribution to playground safety.

For references and details on safety recommendations, we suggest you add the following publications to your library.

- Consumer Product Safety Commission (CPSC) <u>A Handbook for Public Playground</u> <u>Safety</u> (Publication No. 325)
   Standard consumer safety performance specification for playground equipment for public use.
- American Society for Testing and Materials (ASTM) F1487 -Standard consumer safety performance specification for playground equipment for public use.
- American Society for Testing and Materials (ASTM) F1292 -Standard specification for impact attenuation of surface systems under and around playground equipment.
- Canadian Standards Association (CAN/CSA) Z614 -<u>Children's Playspaces and Equipment</u> A National Standard of Canada

To obtain the above publications you may contact the following:

US Consumer Product Safety Commission Washington, D.C. 20207 1-800-638-2772 http://www.cpsc.gov Canadian Standards Association 5060 Spectrum Way, Suite 100 Mississauga, Ontario, Canada L4W 5N6 <u>http://www.csa.ca</u> (800) 463-6727

American Society for Testing and Materials 100 Barr Harbor Dr. West Conshohocken, PA 19428 http://www.astm.org (610) 832-9585 Fax: (610) 832-9555

#### NOTE:

For equipment and components that are certified and compliant with the Canadian Standard, CAN/CSA Z614, BCI Burke Company, LLC has performed the necessary Structural Integrity tests required and can ensure compliance with the requirements of Clause 9.

BCI Burke Company, LLC

## **PRE-INSTALLATION GUIDELINES**

Instructions are clearly presented and simple to read. Each step in the process is concisely explained. There are no secrets to completing a successful BCI Burke play structure package. Carefully read the instructions and familiarize yourself with the assembly procedures. Continually keep in mind that proper planning saves time and money. When your unit is finally assembled, place your instruction sheets in a safe, but easily accessible, file for future referral. Do not deviate or take shortcuts in the assembly procedures.

BCI Burke builds durable, long-lasting equipment. You, however, are responsible for the proper installation and maintenance of the equipment. Always follow the equipment installation drawings provided and DO NOT deviate from the specifications or fabrication.

Several steps are of the UTMOST IMPORTANCE before beginning assembly:

- 1. Read instructions carefully and familiarize yourself with the site plan drawings in the very back of this manual, and the accompanying component installation instructions, arranged in numerical order also in the back of this manual.
- 2. Make sure to plan to orientate and place structures so that slides are not in direct sunlight during play times, as slide surfaces tend to get hot.
- 3. Clear and level an area large enough for your unit and the recommended minimum use and noencroachment zones. A use zone is an area beneath and around the equipment, which we have identified on the plan drawing, which can be found in the back of this manual. This zone under and around your equipment must be free and clear of any obstruction. Overhead obstructions within the use zones of playground equipment that are not part of the play structure (for example tree limbs) shall be at least 84" above each designated play surface or 84" above the pivot point of the swings. All overhead utility line clearances above the use zone areas shall comply with all local, state, and national codes (ex: National Electrical Safety Code).
- 4. Have the proper tools available for installation. You will need an auger for digging footing holes, hammer, rubber mallet, 3/16", 1/4", 5/16", 7/16" and 3/4" drill bits, an accurate level, tape measure along with a standard set of wrenches, and a non-permanent felt-tip pen for marking clamp locations. A tool for completely closing S-Hooks is also necessary.
- 5. The equipment will arrive via truck and will be packed on long pallets, up to 14' long. You will need to plan for a way to remove the pallets from the truck, either with a fork lift with extended forks, or a large group of people to unload from the pallet on the truck by hand.
- 6. The use of a transit is recommended for accurate footing and platform heights. Plot the dimensions of your layout accurately with all 5" OD (Nucleus, Intensity) support posts at 48" centers, all 3-1/2" OD (Voltage) platform support posts at 44" centers and all 2-3/8" OD (Little Buddies) platform support posts at 40" centers. Footing hole locations for other components can be done at a later time during installation.

## **GENERAL INSTALLATION GUIDELINES**

- 1. Identify each component of your equipment before starting installation. The Site Plan drawings in the very back of this manual identify each component by number and also identify each of the upright support posts with a letter and number designation.
- 2. The letter and number designation for the upright posts can also be found on the packaging of each post. See Figure 1 for reference below.



## Figure 1

- 3. The Installation Instructions are located in the back of this manual, arranged in numerical order by the component number. The component number can be found on the site plan and on the list of components in the order documentation.
- 4. The platform heights, which are shown as a number in a circle on the platform on the Site Plan Drawings, are measured from the finished grade of the resilient surfacing material to the top of the platforms. They are shown in inches.
- 5. Footing hole depths may vary depending on the depth of the resilient material to be installed along with local soil and weather conditions. See Typical Concrete Footings in Figures 2 7 (located on pages 11 13). Use masonry bricks, gravel, or shims at the bottom of the footing holes in order to block up and plumb the posts and the platforms to the correct level. Be sure to use red plastic caps provided on ends of posts to keep posts from sinking in support material.
- 6. Assemble the main structure referring to the site plan and installation drawings for correct post and platform orientation. Make sure to attach and use connecting pieces (e.g. bridges, horizontal ladders, stairs and stair barriers, rigid tubes, etc.) to ensure the correct distances to adjacent main structure units, platforms or supports. It is very difficult to adjust post spacing once they are set in concrete.

## **GENERAL INSTALLATION GUIDELINES**

7. After each connecting section is attached, be sure to plumb and level each component and tighten all bolts, nuts and set screws. After tightening all bolts, nuts and set screws, make sure to check any exposed bolt ends to make sure they do not protrude beyond the face of the nut more than 2 threads as required in ASTM F1487 section 6.4.3.



**Figure 1: Thread Protrusion** 

If there are more than 2 threads protruding beyond the face of the nut, check for correct hardware and assembly first. If hardware and assembly are correct, there are several ways to remedy the exposed threads. You could use a shorter bolt, put extra washers behind the nut or cut the bolt removing the extra threads. If you cut the bolt, make sure to grind the ends so that they are free of burrs and sharp edges. If there are opposing bolts, such as on swing hangers, you can loosen one nut and tighten the other to even the protruding threads out

- 8. Once the central unit is in place, brace posts in vertical position until footings have been poured, recheck level and tighten all bolts, nuts and set screws. See corresponding installation drawings.
- 9. Attach safety enclosures (e.g. pipe walls, panels) on all platforms where other play components are not used. Tighten all bolts, nuts and set screws.
- 10. Attach other components (e.g. slides, arch ladders, cargo nets, etc.) next, according to their respective installation instruction drawings. Tighten all bolts, nuts and set screws.
- 11. Pour concrete footings. MAKE SURE UNIT IS PLUMB AND LEVEL BEFORE POURING CONCRETE FOOTINGS. See Typical Concrete Footings in Figure 2 through Figure 5 (Located on Page 7 through Page 9). After concrete footings have been poured and the concrete has set, backfill holes with dirt to reduce the potential of any concrete footing ever protruding above the resilient surfacing material
- 12. Clamp and Bracket Installation Guidelines:

#### Nucleus/Voltage/Intensity

Drill holes to pin or rivet mount brackets per instructions in installation drawings. This is VERY IMPORTANT. This will ensure that the components will not slide, slip, or rotate on the brackets. **NOTE:** In coastal areas, a clear silicone caulk (provided in installation kit with purchase of Burke Coastal Package) can be utilized to help seal the drilled holes prior to inserting rivets into the mount brackets. See typical mount bracket assembly drawings located in the installation instructions section.

## **GENERAL INSTALLATION GUIDELINES**

- 13. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines. See Resilient Surfacing Material, Figures 6 8, and Table 1 (located on pages 10 12).
- 14. Attach swings, rings, and tire swings after resilient surfacing material is in place. Completely close all "S" hooks. See ASTM Requirements for Fastening Devices in Figures 9 12 (located on page 13).
- 15. Attach Warning and Manufacturer labels. See Warning and Manufacturer Labels for instructions and Figures 13 14 (located on pages 14 15).
- 16. After installation is complete, inspect the entire unit. Make sure all fastening hardware and setscrews are tight, and all drive pins and rivets have been installed. Make sure all "S" hooks are completely closed. Check all coated parts to ensure coating is covering all metal; if not, follow repair instructions listed in the Maintenance section.
- 17. Most of our fasteners are precoated with a Loctite patch. As noted previously, fasteners should only be started for initial assembly so that the Loctite is not activated. Once you are going to tighten the hardware, use this list for standard fastener torque specs. Note: it may be necessary to tighten a bolt more than standard torques in order to have the assembly draw two parts together. We do not recommend the use of impact wrenches for the assembly of any playground components as they can damage the hardware, nutsert and component part.

1/4"-20	100 in-lb
5/16"-18	140 in-lb
3/8"-16	250 in-lb
7/16"-20	400 in-lb



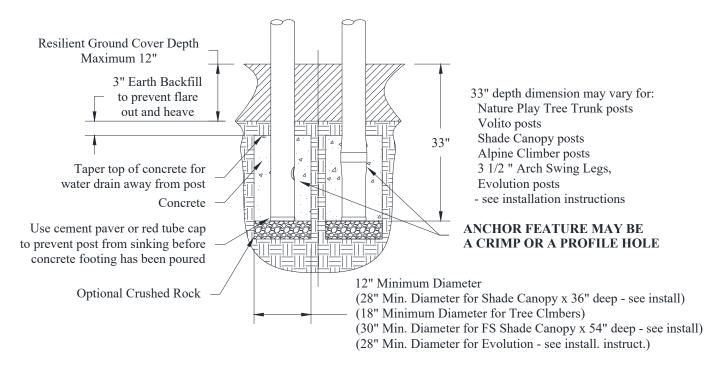
**NO IMPACT WRENCHES** 

Also note that fastener torque should not be tested after the Loctite has been activated or set up. It would take a much greater torque to break the screw loose, and that may cause the Loctite to not hold the screw tight.

18. We strongly recommend complete inspections for new structures occur within three (3) days after installation, within seven (7) days after installation and on a regularly scheduled basis thereafter. Playgrounds with heavy use should be inspected daily. For your convenience there is an Inspection Checklist (located on page 16).

## **TYPICAL CONCRETE FOOTINGS**

Burke specifies concrete in-ground footings, surface mount, and surface mount pier footings to provide the foundation for the playground structure. The details provided on this page recommend minimum footing requirements. This page is what you will reference when installation prints require you to see a typical footing detail. The following details are to be used on all Burke products unless specific dimensions are given on a particular component installation sheet.



**Figure 2: Support Post Footing Detail** 

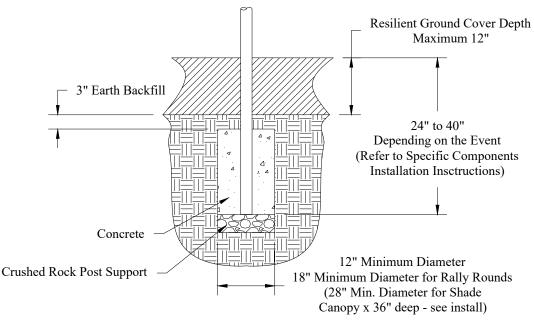
Support Post Footing Detail is used for the following:

- 5" OD TUBING
- 3 1/2" OD TUBING
- ALL SQUARE TUBING
- See Installation Instructions to determine depth of posts for SHADEPLAY CANOPIES and EVOLUTION tower structures.

#### **Special Considerations:**

- 1. Consult your local building codes to assure proper depth of footings. The required diameter and depth of the concrete can vary depending on soil conditions and temperature extremes.
- 2. In cold weather climates the concrete should be deep enough to reach below the frost line, especially the main support posts.
- 3. In sandy or loose soil conditions the diameter of the footing should be doubled to provide a stable support structure.
- 4. Use masonry bricks, gravel, or shims at the bottom of the footing holes in order to block up and plumb the posts and the platforms to the correct level.

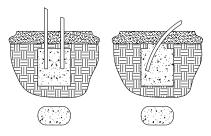
## **TYPICAL CONCRETE FOOTINGS**



**Figure 3: Play Event Footing Detail** 

The Play Event Footing Detail is used for the following:

- All tubing 2 3/8" OD and smaller
- All Playground Structure Play events
- 12' x 12' and 15' x 15' ShadePlay Canopy Posts (36" MIN DEPTH)
- 15' x 19' and HEX ShadePlay Canopy Posts (36" MIN DEPTH)



#### Figure 4: Optional Play Event Footing

Some play events have 2 supports close together or a single support that enters the ground at an angle. A trench like hole can be excavated to cover both situations as shown above. The starting size of the trench should adhere to the dimensions listed on the play event footing detail.

#### **Special Considerations:**

- 1. Consult your local building codes to assure proper depth of footings. The required diameter and depth of the concrete can vary depending on soil conditions and temperature extremes.
- 2. In cold weather climates the concrete should be deep enough to reach below the frost line, especially the main support posts.
- 3. In sandy or loose soil conditions the diameter of the footing should be doubled to provide a stable support structure.

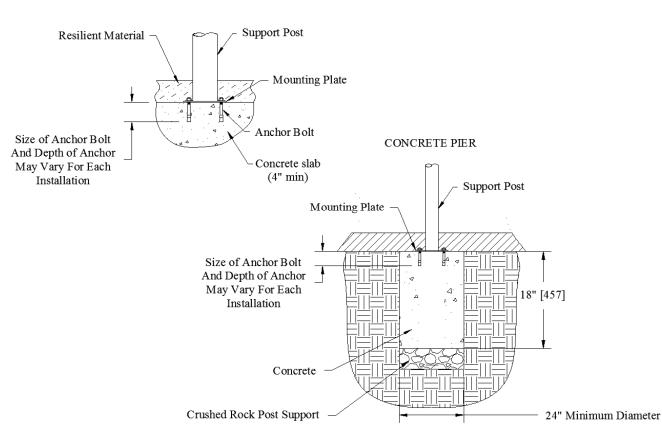
#### BCI Burke Company, LLC

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## **TYPICAL CONCRETE FOOTINGS**

When installing a surface mounted structure or event as seen in Figure 5, there may be multiple mounting plate styles depending on the type of supports involved. A hole is to be drilled and an anchor installed for each hole or slot in all mounting plates. Surface mounted events and structures are to be installed to concrete surfaces only. Concrete is to be a minimum of 4 inches in thickness and have a minimum strength rating of 3000psi for structures without shade canopies; 4000psi with shade canopies.

Burke recommends 1/2" diameter anchors, with the length based on the thickness of the concrete slab, the type of anchors and the recommendation of the anchor manufacturer. The pullout strength of each anchor should be a minimum of 2600 pounds. If there is a shade canopy on the structure, surface mounting must be approved by the factory first, and anchors used must be an epoxy based anchor with a minimum pullout strength of 4000 pounds.



CONCRETE SLAB

**Figure 5: Surface Mount Detail** 

#### **Special Considerations:**

- 1. Consult your local building codes to ensure the use of the proper anchor bolt size.
- 2. Concrete must have the proper amount of curing time to ensure that anchors have maximum holding power.
- 3. Existing concrete is to be free of cracks and heaving in areas where anchor bolts are to be installed.

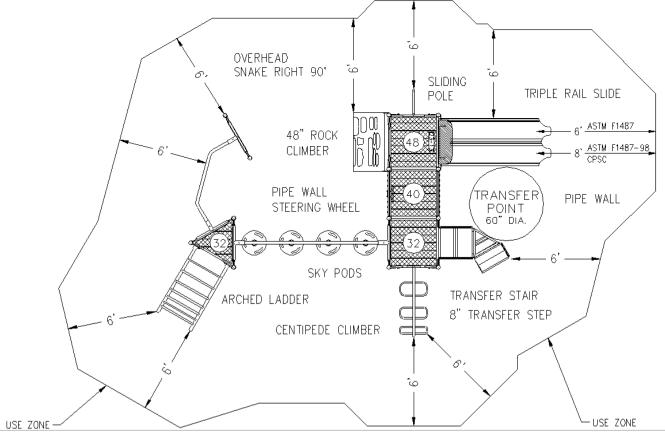
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## **RESILIENT SURFACING MATERIAL**

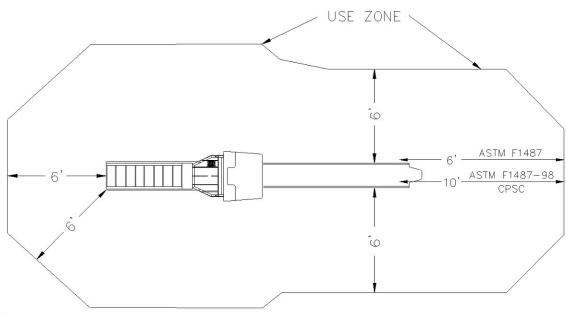
As the owner of a playground, you are responsible for understanding the recommendations for surfacing and providing and maintaining an appropriate impact attenuating surface material under and around all playground equipment.

Since the majority of playground injuries result from falls, use only a soft, resilient surface under and around play equipment. Never place play equipment on hard surfaces, such as concrete or asphalt. Grass surfaces are not recommended; compacted earth will not cushion falls. Shock-absorbing surfaces should meet the U.S. Consumer Product Safety Commission (CPSC) recommendations as detailed in *A Handbook for Public Playground Safety*. (Revision dated 1997, Publication No. 325, pages 3 through 6 and Appendix C pages 38 through 40), ASTM F1292: Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment and ASTM F1487: Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use. For installations in Canada, shock-absorbing surfaces should also meet the requirements of CAN/CSA Z614 Clause 10. Use the soft, resilient surface in the use zone or protective surfacing zone, which we have identified on the Site Plan Drawing. (Sample in Figure 6 below.) There are also additional space requirements called no-encroachment zones around moving equipment and slides, as required in CAN/CSA Z614. (Typically extending an additional 1.8 m beyond the protective surfacing zone. These are not shown on the plan drawings.)



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#### Figure 6: Sample Site Plan Drawing RESILIENT SURFACING MATERIAL



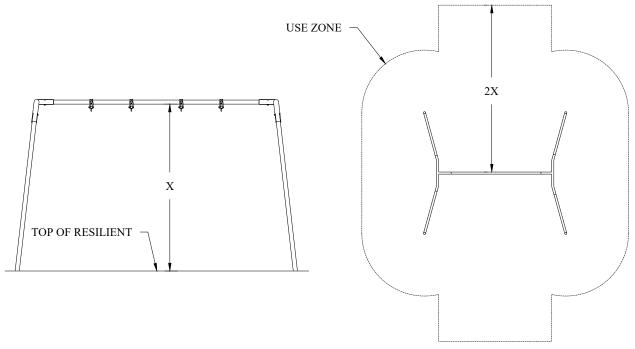
**Figure 7: Use Zone for Slides** 

The selection of the resilient surface should be based on the fall potential from the highest platforms as well as the height of the average user. For stationary components and slides it should extend a minimum of 6 feet in all directions as shown in Figure 7.

To the front and to the rear of to-fro swings, the use zone should extend a "minimum distance of 2X on a line extending 90° both front and rear from the longitudinal direction of the suspending beam, where X equals the vertical distance from the top of the protective surfacing to the pivot point of the swing" and the use zone for a rotating tire swing "shall be a minimum horizontal distance of Y + 72 in. (1830 mm) in all directions from pivot point of the swing, where Y equals the vertical distance between the pivot point and the top of the swing seat or suspended member." (ASTM F 1487 Pg. 13-14. A minimum horizontal distance of 2Y is required in Canada for rotating tire swings). See Figure 8 (Located on Page 12).

In addition to the use zone required in ASTM and CPSC, a no-encroachment zone may also be provided. This is an area in which the children run and play around the equipment. To prevent traffic conflicts, the no-encroachment zone should be free of any other equipment, trees, fencing, curbing, or other hazardous objects and should extend beyond the soft resilient surfacing a minimum of 6 feet. (No-encroachment zones for to-fro and tire swings are required in Canada).

## **RESILIENT SURFACING MATERIAL**



**Figure 8: Use Zones for To-Fro Swings** 

An impact attenuating surfacing material is required under and around all equipment. The Playground Surfacing Technical Information Guide published by the U. S. Consumer Product Safety Commission contains the results of tests performed to determine the relative shock-absorbing properties of seven loose-fill materials commonly used resilient surfacing. The report contains a table of Critical Heights, the height below which a life-threatening head injury would not be expected to occur, for each of the loose-fill surface materials tested. This information is available through the Consumer Product Safety Commission and is shown below in Table 1.

Type of Loose-Fill Material		Compressed Depth of	Protects to fall height of:
		Loose-fill material	
	Wood Chips	9 inches	10 ft.
	Wood Mulch (non-CCA)	9 inches	7 ft.
	Shredded/recycled rubber	9 inches	10 ft.
	Pea Gravel	9 inches	5 ft.
	Sand	9 inches	4 ft.

<b>Table 1: CPSC Critical Fall Heights</b>	(taken from	pub. 325, p	bage 10)
--	-------------	-------------	----------

Manufactured surfaces, such as rubber matting materials, may also be suitable for use under and around playground equipment. Manufacturers of these surface materials should be contacted for specific information on the shock-absorbing performance and cost of their individual products.

## ASTM REQUIREMENTS FOR FASTENING DEVICES

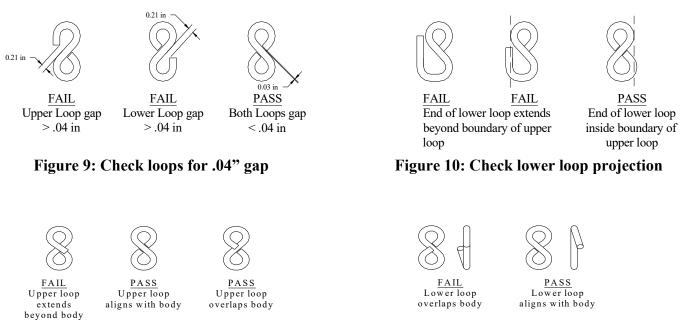




Figure 12: Check lower loop alignment

## **UPRIGHT POST NAMING SCHEME**

**0: STEEL IN GROUND 5: ALUMINUM IN GROUND** 8 STEEL SM 9 ALUMINUM SM XX: LENGTH X: MULTIPLES 1 - 72 S3 - 0 \*072 IS NEW 3XX: 3 ½" OD S: SWAGED PREFIX FOR 5XX: 5" OD C: CAPPED ALL POSTS R: ROOF **B: STUBBY- TOP STACK** T: TOP - ALUM ONLY

Figure 13: Upright Post Naming Scheme

#### The following is the <u>Owner's</u> responsibility. Please read it carefully.

Labels, as required by ASTM F 1487, CAN/CSA Z614, CPSIA and California law, have been included with this playground equipment and must be applied after installation is complete.

#### Instructions

- Choose highly visible label locations at a height of 4' to 5' above the resilient surfacing material. See Figure 13.
- The preferable location would be out of direct sunlight.
- Posts are the best location for labels. Do not place on PVC coated items or areas of high wear.
- Surface must be clean and dry prior to applying labels.
- Replacement labels are available upon request should a label become destroyed, mutilated or vandalized. Contact Burke Customer Service at 1-800-356-2070.



Age-appropriate Safety Labels with Manufacturer's Identification – You will receive labels with your equipment that designate the age appropriateness based on the specific components in your design. (Note: Three labels not shown here are those for 6-23 month olds, 4-5 year olds and 4-12 year olds. Age appropriateness is determined by ASTM requirements and CPSC recommendations.) Apply one label adjacent to or visible from the primary entrance to a structure and one label visible from another entrance on the opposite side of the structure. There should be a minimum of two labels on each play structure. Larger structures may have additional labels included. These labels should be placed near other entrances on opposite sides of the structure.

Burk	(e	BCI Burke Company, LLC Fond du Lac, WI USA 1-800-356-2070 www.bciburke.com
Order:	12	345
Structure	e: 99	-99999-1
Date:	10	28/2016
Equipment identification	label for ent	ire play area unless otherwise labeled.

#### AWARNING

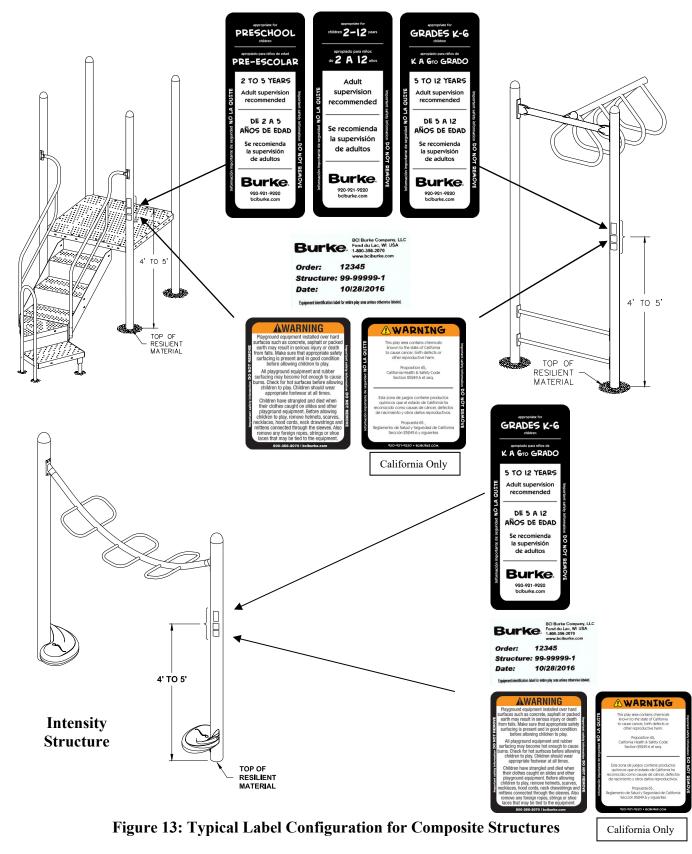
Playground equipment installed over hard surfaces such as concrete, asphalt or packed earth may result in serious linury or death from falls. Make sure that appropriate safety surfacing is present and in good condition before allowing children to play. All playground equipment and rubber surfacing may become hot enough to cause purch, check for hot surfaces before allowing children to play. Children should wear appropriate footwear at all times. Children have strangled and died when their clothes caught to nsides and other playground equipment. Before allowing children to play, remove helmets, scarves, necklaces, hood cords, neck drawstrings and mittens connected through the sleves. Also remove any foreign ropes, strings or shoe laces that may be tied to the equipment. **Equipment Identification Label and cover label -** Place this label and clear protective cover label on all equipment, either directly below the Age-appropriate designation or as the top most label for equipment that does not have a specific age-appropriate label. See Figures 13, 14 and 15. This label provides the tracking label information required by CPSIA.



Warning Labels - Place one directly underneath each of the Age-appropriate Safety Labels and/or Manufacturer's Identification Label. If you have additional labels they should be placed near other entrances on opposite sides of the structure.
Warning Labels are a Requirement in the ASTM F1487
Standard and they should serve as a constant reminder of the potential hazards associated with using the play equipment.
California Prop 65 Warning Label – Required in California only.

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## WARNING AND MANUFACTURER LABELS



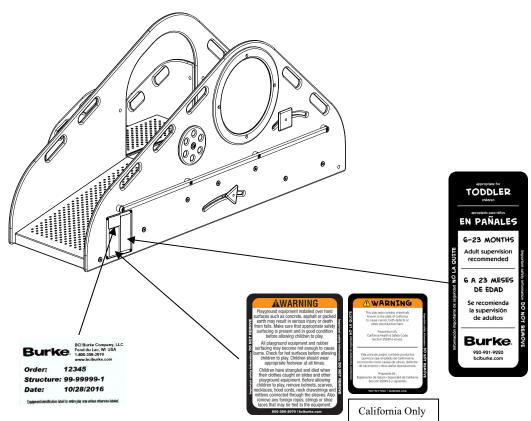


Figure 14: Typical Label Configuration for Composite Structures

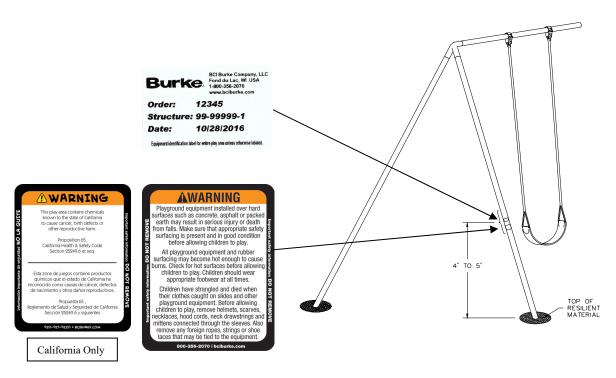


Figure 15: Typical Label Configuration for Non-Age Specific Equipment

## **INSPECTION CHECKLIST**

Review all Playground Installation Guidelines, particularly checking for specified dimensions. Make sure actual installation dimensions agree with the ones in the instructions.	Check height of all upper body equipment, such as horizontal ladders. The height of these components should agree with dimensions as specified in Playground Installation Guidelines when measured from top of the resilient surfacing material.
Double check deck heights. The height of the deck or platform is measured from the top of the resilient surfacing material to the top of the platform.	Touch up any scratches or installation damage to powder coated finish with color-matched spray paint supplied with the equipment.
Clean dried concrete off support posts and any other affected components	Touch up any exposed metal on coated parts following the instructions in the Maintenance section.
Review entire structure to insure that there are no completely bounded openings greater than 3 1/2" and less than 9". Completely bounded openings are openings that are enclosed on all sides.	Check ropes of rope climbers for any installation damage such as cuts that may expose the steel reinforcement strands.
Insure all post ends have properly installed post caps. Insure the drive rivets are secure.	Insure proper use zone has been allowed for equipment. See Site Plan Drawing included in this manual to check dimensions of required zone.
Insure all fasteners are tightened according to specifications listed on your installation instructions.	Dispose of all packaging material properly. Recycle appropriate materials and keep items like plastic bags out of reach or contact of small children.
Insure all "S" hooks are completely closed. An "S" hook is considered closed when there is no gap or space greater than .04" when measured with a feeler gauge, or the thickness of a dime.	Insure all support post connections are permanently secured. Insure all drive rivets and/or spring pins have been installed. Review installation instructions for specific locations.
Inspected by:	Inspection Date:
	BCI Burke Company, LLC For questions, call us at:

1-800-356-2070

## MAINTENANCE

Poorly Maintained playground equipment and surface areas can contribute to serious injury. Develop a comprehensive maintenance program, which should include staff training, use of inspection checklists, prompt repair of discovered problems and detailed documentation. To obtain more information, contact the U. S. Consumer Product Safety Commission (CPSC), Washington, D. C. 20207 (1-800-638-2772) and request "A Handbook for Public Playground Safety" Revised 1997.

#### **INSPECTIONS:**

It is critical to maintaining the long life of your equipment and preventing injuries, to establish a routine maintenance program.

Once your Burke equipment has been installed and your Final Inspection Check completed, we recommend a complete inspection within seven (7) days after installation and on a regularly scheduled basis thereafter. *Playgrounds with heavy use or in coastal areas should be inspected daily.* 

As a guideline, please see the **Frequency of General Maintenance** and **General Maintenance Checklist**, which provide charts with recommended frequency for inspections as well as suggested inspection areas of your play equipment.

#### Surfacing:

If you have loose surfacing materials, such as sand or wood chips, check for specified depth throughout the playground. Add new material as required.

If your safety surfacing is poured-in-place or a matting or tile, check for wear or damage.

## If your playground is installed in atmospheric conditions of high salt content, i.e. near the ocean, the chance for corrosion is much more likely. Therefore, frequent checks are highly recommended.

#### **Instructions for Inspection Checklist:**

- 1. Determine what is to be inspected and how frequently.
- 2. Establish a regular pattern of inspection.
- 3. File Inspection Report with your permanent records.
- 4. If a replacement part is needed, contact your local representative.
- 5. If repairs are needed, list action taken and date to be filed in your permanent records.

## MAINTENANCE

#### (Check Material Safety Data Sheet before starting to ensure safety.)

#### **PVC Coating Repair Instructions:**

- 1. Segregate the area of the equipment (by yellow tape, fencing, etc.) from children, where the repair is located.
- 2. Clean the area in need of repair.
  - a. Remove any coating that is loose; trim coating with a knife if necessary.
  - b. If there is any rust, remove and clean thoroughly.
- 3. Once clean, take container of repair material and open the spout and squeeze out the material into the cleaned area in need of repair.
  - a. Do not open container of repair material until ready to use.
  - b. As soon as you finish using the container with repair material, close it tightly immediately so it does not dry out.
- 4. Take a putty knife or similar tool to spread the material evenly. It should be at the same level thickness as the original coating when complete.
- 5. Let dry for about 15 minutes and recheck. As the material dries, it shrinks so you may need to add material repeating the same steps (3-4) mentioned above.
- 6. Once fully dry (1 full day to ensure proper cure), remove yellow tape, etc. that segregated the children from the area repaired. The children may be allowed to play again.

#### **Touch-up Painting Instructions:**

- 1. Segregate the area of the equipment (by yellow tape, fencing, etc.) from children, where the repair is located.
- 2. Clean area to be touched up by removing any loose paint or dirt particles and removing any rust with a light grit sand paper. Wipe area with clean cloth.
- 3. For best results, primer and touch up paint should be at room temperature. Avoid high heat and high humidity when applying the touch up paint. Shake can thoroughly to allow mixing ball to properly mix contents of the can.
- 4. For structures in coastal areas: Apply primer in *light* coats until area is covered. Allow primer to dry for 30 minutes (Primer is supplied with purchase of Burke Coastal Package).
- 5. For structures in coastal areas: Apply touch up paint in several light coats to cover the primed areas. Avoid drips and runs of the touch up paint for the best finish. Let dry for a minimum of 6 hours before use.

#### **Graffiti Remover:**

For proper use and best results of the Graffiti Remover that is supplied with each Burke Play Structure to remove unwanted marks or vandalism, please follow this procedure: **For Plastic, PVC coated, rubber or GFRC and rock holds:** 

- Lightly spray the affected area and wipe off with a dry cloth/towel. For stubborn marks, spray
  affected area and let sit for 15 seconds and then wipe off and dry with a cloth/towel.
  For Steel/Powder coated parts:
- 1. Spray a dry cloth/towel with the graffiti remover to get a small area of it wet. Wipe the area to be cleaned with that dampened cloth. Repeat if unwanted marks are still evident. Do not spray the Steel/Powder coated part directly or let the Graffiti Remover sit on the powder coated part for an extended period of time, as it could affect the finish/shine of the powder coat. Do not spray Graffiti Remover on bearings or other areas that require or hold grease.

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## MAINTENANCE

## **ShadePlay Canopy Instructions**

To clean shade canopy fabric use plain water to hose down the fabric and remove any debris. **DO NOT** use any type of detergent. Contact with organic solvents, halogens or highly acidic substances may reduce the service life of the fabric and void the warranty.

# CAUTION: The ShadePlay canopy must be removed from the play structure before inclement weather, severe wind storms or winter (snow) weather to prevent damage to the shade fabric or play structure.

To remove and later re-install the ShadePlay canopy, the quick release fastening mechanism will facilitate easy removal and re-installation.

To remove the ShadePlay canopy:

- 1. Remove end cap from end of tensioning rafter. See Figure 16.
- 2. Remove lower 3/8" x 2" button head cap screw and 3/8" locknut at the pivot joint that secures the tensioning arm in the closed position. See Figure 16.
- 3. DO NOT TRY TO REMOVE PIVOT PIN. It is locked into position with a set-screw located on the top side of the rafter.
- 4. Carefully push up tensioning arm into the 'Open Position'. See Figure 17.

#### WARNING: BE EXTREMELY CAREFUL WHEN PIVOTING TENSIONING ARM INTO OPEN OR CLOSED POSITION. TENSIONING ARM COULD SPRING UP DUE TO THE TENSION BEING APPLIED BY CANOPY CABLE SYSTEM AND COULD RESULT IN INJURY. KEEP HANDS AND FINGERS OUT FROM BETWEEN CANOPY AND ARM AND OUT OF PIVOT JOINT AREA.

- 5. Unhook shade canopy fabric, cable end(s) and/or turnbuckle from hook.
- 6. Carefully pull down tensioning arm into 'Closed Position' and install removed hardware securing end cap and tensioning arm in closed position.
- 7. Repeat steps 1 thru 6 as necessary for all tensioning rafters.
- 8. Fold or roll up ShadePlay canopy and store in dry safe location until ready to re-install.

To re-install the ShadePlay canopy:

- 1. Remove end cap from end of all rafters.
- 2. Remove lower 3/8" x 2" button head cap screw and 3/8" locknut at all the pivot joints that secure the tensioning arms in the closed position. See Figure 16.
- 3. Look to make sure pivot pin is in the pivot joint of all tensioning arms. See Figure 17.
- 4. Lay ShadePlay canopy over rafters and orientate it so that each tensioning arm has a canopy corner. See Figure 18.
- 5. Attach canopy to all rafters, with tensioning arms in open position attach the canopy corner, cable end and turnbuckle end onto hook.
- Continue to tighten canopy by carefully pulling tensioning arms down into 'Closed Position'. If canopy is too tight to pull arm down, loosen turnbuckle tension a small amount. See Figure 18.

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#### WARNING: BE EXTREMELY CAREFUL WHEN PIVOTING TENSIONING ARM INTO OPEN OR CLOSED POSITION. TENSIONING ARM COULD SPRING UP DUE TO THE TENSION BEING APPLIED BY CANOPY CABLE SYSTEM AND COULD RESULT IN INJURY. KEEP HANDS AND FINGERS OUT FROM BETWEEN CANOPY AND ARM AND OUT OF PIVOT JOINT AREA.

- 7. After all tensioning arms are in 'Closed Position' look around canopy for major wrinkles in fabric. The majority of wrinkles can be removed by moving the tensioning arms back into the 'Open Position' and tightening each turnbuckle a small amount. Repeat this process, tightening the turnbuckles only a small amount each time until the major wrinkles are eliminated. Minor wrinkles will disappear with time in the environment and in the stretched state. Tighten all turnbuckles evenly to spread tension. See Figure 18.
- 8. When tightening canopy is complete, secure tensioning arms with 3/8" x 2" button head cap screws and 3/8" locknuts. Tighten all hardware on pivot joint. See Figure 16.
- 9. Install end caps to all rafter ends using 3/8" x 3/4" SS button head cap screw (without locking thread) and 3/8" SS flat washer. See Figure 16.

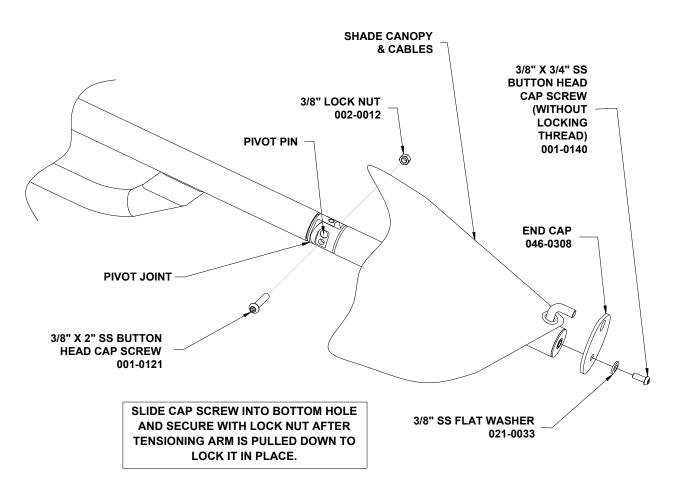


Figure 16: Tensioning Arm in 'Closed Position'

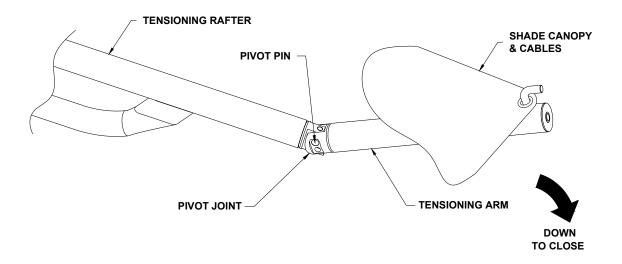
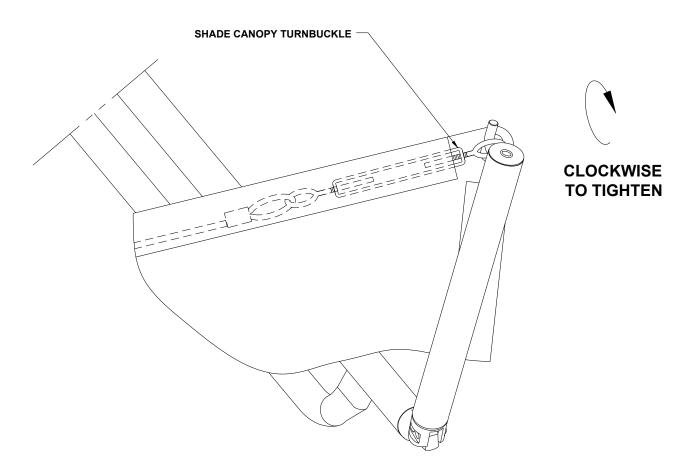
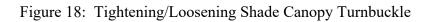


Figure 17: Tensioning Arm in 'Open Position'





# MAINTENANCE EZ Tension ShadePlay Canopy Instructions

To clean shade canopy fabric use plain water to hose down the fabric and remove any debris. **DO NOT** use any type of detergent. Contact with organic solvents, halogens or highly acidic substances may reduce the service life of the fabric and void the warranty.

# CAUTION: The EZ Tension ShadePlay canopy must be removed from the play structure before inclement weather, severe wind storms or winter (snow) weather to prevent damage to the shade fabric or play structure.

To remove and later re-install the EZ Tension ShadePlay canopy, the quick release fastening mechanism will facilitate easy removal and re-installation.

To remove the ShadePlay canopy:

- 1. Remove end caps from end of all tensioning rafters. See Figure 19.
- 2. Locate tension arms with 15/16" bolt head located at the end. Using a 15/16 socket rotate bolt head counter-clockwise to slide the holding pin upwards releasing the tension of the canopy.

#### WARNING: DO NOT USE ANY POWER TOOLS TO ROTATE THIS BOLT.

- 3. Remove lower 3/8" x 2" button head cap screw and 3/8" locknut at the pivot joint that secures the tensioning arm in the closed position. See Figure 19.
- 4. DO NOT TRY TO REMOVE PIVOT PIN. It is locked into position with a set-screw located on the top side of the rafter.
- 5. Carefully push up tensioning arm into the 'Open Position'. See Figure 20.

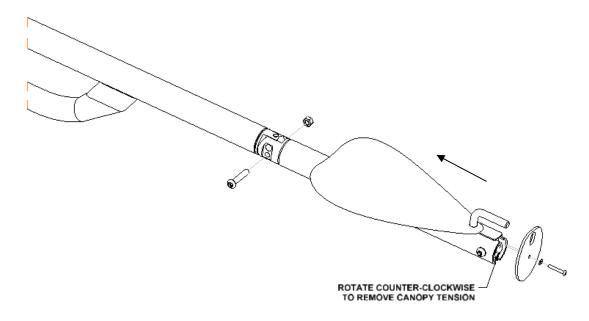


Figure 19: EZ Tension Arm in Closed Position

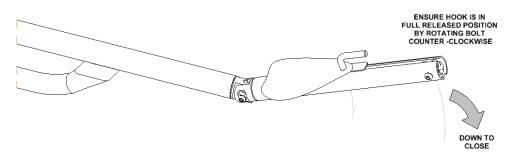


Figure 20: EZ Tension Arm in Open Position

#### WARNING: BE EXTREMELY CAREFUL WHEN PIVOTING TENSIONING ARM INTO OPEN OR CLOSED POSITION. TENSIONING ARM COULD SPRING UP DUE TO THE TENSION BEING APPLIED BY CANOPY CABLE SYSTEM AND COULD RESULT IN INJURY. KEEP HANDS AND FINGERS OUT FROM BETWEEN CANOPY AND ARM AND OUT OF PIVOT JOINT AREA.

- 6. Unhook shade canopy fabric, cable end(s) and/or turnbuckle from hook.
- 7. Carefully pull-down tensioning arm into 'Closed Position'
- 8. Rotate bolt clockwise to move the holding pin back to the end in the closed position.

#### WARNING: DO NOT USE ANY POWER TOOLS TO ROTATE THIS BOLT.

- 9. Install removed hardware securing end cap and tension arm in closed position.
- 10. Repeat steps 1 thru 6 as necessary for all tensioning rafters.
- 11. Fold or roll up EZ Tension ShadePlay canopy and store in dry safe location until ready to reinstall.

To re-install the ShadePlay canopy:

- 1. Remove end caps from ends of all rafters.
- 2. With tension arms in open position, attach canopy corners to the hooks located at the end of the tensioning arms shown in Figure 20. Ensure the hooks are in the fully released position before attaching canopy by rotating the bolt counter-clockwise.
- 3. Begin tightening the shade canopy by pulling all of the tension arms into the closed position shown in Figure 19. When arms are in closed position, insert hardware to lock arms in place.
- 4. Using a 15/16" socket, turn the bolt head located in the end of the mechanisms until the hook holding the canopy is flush with the end of the tube. Clockwise rotation will apply tension to the canopy and counter-clockwise rotation will release the tension of the canopy.

#### WARNING: DO NOT USE ANY POWER TOOLS TO TURN BOLT THIS MUST BE DONE WITH A SOCKET WRENCH

- 5. Look around at the shade canopy for small wrinkles in the fabric. Wrinkles can be removed by removing the tension in the canopy by turning the bolt counter-clockwise and moving the tension arms back into the open position and tightening the turnbuckles a small amount (1/4 1/2 inch).
- 6. Install end caps to ends of rafters.

#### BCI Burke Company, LLC

# **Sensory Panel Maintenance and Troubleshooting**

#### **Care and Maintenance**

Please refer to the installation instructions for details on battery installation. Apart from replacing the batteries from time to time, the unit is virtually maintenance free and has no other user-serviceable parts. Any attempt to tamper with the unit in any way other than advised in this guide will void the unit warranty.

#### Cleaning

DO NOT use any chemicals or abrasive cleaners on the electronics control housing, sensors or speaker grill. Use a household hand pump water sprayer (the type you would water small household plants with) with a solution of water and a mild household detergent (the type you would use to clean your dishes) and gently spray the unit and wipe off with a soft damp cloth. DO NOT use a pressure washer or high powered hose to clean the unit.

#### **Speaker Grill**

Keep the speaker grill clean and clear of dirt and obstructions. The speaker itself is a marine grade external speaker and it will not get damaged by cleaning with water. DO NOT attempt to push anything through the speaker grill to clear any obstructions as this may damage the speaker membrane and/or reduce the water-resistance of the whole unit.

Fault	Solution
Low or decreased volume	• Ensure that the speaker grill is clear from obstruction. Volume is set at 75% during manufacture. If more volume is required, please seek advice from the manufacturer. Tampering with the electronic circuitry will void the warranty.
Not all the sensors are activating the sound replay	• Check that the speaker and sensor connectors are securely seated.
Water or evidence of water inside the electronic housing	• If water is found inside the housing please contact the manufacturer immediately.

#### **Troubleshooting Guide**

Fault	Solution
No sound or intermittent sound with older batteries	<ul> <li>Check that batteries are firmly seated between the terminals in the battery holder and are in the correct orientation. Check that the speaker and sensor connectors are securely seated.</li> <li>Make certain that the sound chip on the printed circuit board has not been dislodged. If you suspect that it is dislodged, see the instructions below.</li> <li>Replace the batteries with high-quality alkaline batteries (i.e. Duracell Ultra or better).</li> </ul>
No sound or intermittent sound with new batteries	• Allow at least five minutes for the batteries and unit to acclimatize to the environment.
	• Check that batteries are firmly seated between the terminals in the battery holder and are in the correct orientation. Check that the speaker and sensor connectors are securely seated.
	• Make certain that the sound chip on the printed circuit board has not been dislodged. If you suspect that it is dislodged, see the instructions below.
	• To eliminate the possibility of a faulty battery, replace the batteries with another set of high-quality alkaline batteries (i.e. Duracell Ultra or better). Again, allow at least five minutes for the batteries and unit to acclimatize to the environment.
The sound chip appears to be dislodged from its housing	• If ALL of the pins on the chip appear in or directly above the corresponding socket on the housing, a light and even pressure may be used to re-seat the chip. IMPORTANT – excessive or uneven pressure may cause the chip to be damaged. If in doubt, contact the manufacturer.
	• If the pins are not located in or directly above the corresponding housing socket, DO NOT attempt to use pressure to re-seat the chip. Contact the manufacturer for advice.
No sound or intermittent sound when all previous solutions have been exhausted	• The unit and its components have been designed to be easily swapped out by a skilled service technician. In the rare event of failure, please contact the manufacturer for assistance. Any attempt to tamper with the unit in any way other than advised in this guide will void the unit warranty.

# MAINTENANCE

# **Climbing Rope Maintenance**

- A routine check per the Maintenance Checklist is very important.
- Address any issues early!
- Monitor wear versus mis-use / vandalism.
- Avoid sand as a resilient material.



# **Addressing Frayed/Cut Ropes**

- Simple flaming technique with a handheld propane torch approved by rope manufacturer. Contact your Burke Representative for Details.
- Swift, sweeping motion with handheld torch so as not to burn or scorch the rope.
- Monitor wear of rope AFTER flaming is done.
- When metal strands are very evident, rope should be purchased / replaced.

# MAINTENANCE GFRC Maintenance

#### **GFRC - Cleaning Methods**

- 1. For smaller surface areas, a scrub brush and light cleaning detergent mixed with water is the best approach. A ZEP exterior siding cleaner can be heavily diluted and scrubbed on and off with the brush.
- 2. For larger areas, you can use a pressure washer. The pressure washer should be no greater than a 1500 PSI washer. Use a 25 to 40-degree wide nozzle to prevent surface damage of the topical paints on the theme finishes. Hold the nozzle a minimum of 2' away from the surface. Clean a small, hidden test area before starting the project to ensure the pressure washer will not damage the surface. Pressure washers generate very high pressure, so it's essential to take safety precautions and follow all the manufactures instructions when using them:
  - Use both hands when holding the spray nozzle.
  - Don't use pressure washers while standing on a ladder.
  - Wear protective eyewear at all times.
  - Never point the nozzle at anyone.
- 3. An alternative to using a pressure washer is to use a *home-washing kit* that attaches to the garden hose. The kits aren't as quick or as effective as pressure washers but are easier to use and are available at most local hardware stores.

#### **GFRC - Cleaning**

- 1. Cover or remove anything you don't want wet or washed from the area that is to be cleaned.
- 2. Check the theme finishes for trouble spots that are covered in mildew, mold or moss. To determine whether a trouble area is affected by mildew, apply a small amount of diluted household bleach to the area. If it clears up, the problem is mildew. Pressure washers usually don't remove mildew, so you'll need to clean those areas by hand. Scrub off the mildew using a solution of 9 parts water and 1 part bleach.
- 3. If using a power washer with a soap feed, you may use a mild solution of water and detergent, or you may also use a ZEP cleaner or alternative that is specifically for power washers, following the instructions for that specific cleaner.
- 4. If there is indication of efflorescence on the GFRC surface, this can be cleaned with a 10% muriatic acid solution.
- 5. Remember, always perform cleaning on test area and inspect for damage before proceeding.
- 6. Begin spraying the surface, holding the nozzle at a 45-degree angle. Work from the bottom up, and move across the surface from side to side at a steady pace, maintaining the 2' distance between the surface and the nozzle head.
- 7. Rinse with clean water from the top down to prevent streaks.

#### **GFRC - Repairing**

- 1. Minor scuff marks can be painted with the touch up repair kit provided. Multiple colors are provided in order to blend in with the original theme and markings.
- 2. If damage requires patching, a standard water plug kit for concrete repair can be purchased at any local hardware store. Follow the instructions for repair, making sure to create a similar surface texture of rock or tree bark in the concrete while it is still wet.
- 3. Once concrete patch is dry it can be painted with the touch up repair kit provided.

#### BCI Burke Company, LLC

660 Van Dyne Road • P.O. Box 549 • Fond du Lac, WI 54936-0549 • (920) 921-9220 • 1-800-356-2070 • Fax (920) 921-9566 <u>www.bciburke.com</u>

# MAINTENANCE ZipVenture Maintenance and Inspection

ZipVenture products should be inspected and maintained as specified for all playground equipment. The following are additional maintenance and inspection procedures specific to the ZipVenture products.

#### **Tools Required:**

- 1. 8-ft step ladder
- 2. Ratchet wrench with Burke security bits
- 3. 9/16" & 3/4" sockets for ratchet wrench
- 4. Torque wrench
- 5. 50-lb weight with means of attaching to trolley seat (Burke recommends a sand bag and nylon webbing strap)

#### Maintenance and Inspection Points:

- 1. Visually inspect entire structure for:
  - a. Loose, frayed, or tangled wires from wire rope
  - b. Broken springs at either end of cable
  - c. Loose spring brake parts (springs should be affixed to the cable at one end and not able to slide away)
  - d. Screws missing from spring brake parts
- 2. Move trolley to 20 feet from arrival (low) end of ride. Measure from the loop at the end of the wire rope. Holding seat level, measure distance from top of resilient material to bottom of seat. This should be in the range of 13 to 15 inches. If not, the tension in the wire rope will need to be adjusted. Make sure resilient material is maintained to the proper level and is consistent each time you are measuring.
- 3. Attach 50-lb weight to seat of trolley. With the trolley in the same 20 feet from arrival end position, and holding seat level, measure distance from top of resilient material to bottom of seat. This should be in the range of 11 to 13 inches. If not, the tension in the wire rope will need to be adjusted. Make sure the resilient material is maintained to the proper level and is consistent each time you are measuring.
- 4. Check tightness of fasteners. Wire rope clips should be tightened to 45 ft-lb torque.
- 5. Use ladder to inspect wire rope at center, both ends and also under the springs. As you inspect the wire rope, note that a strand is a group of wires twisted together, and multiple strands are then twisted around a central core to form the wire rope or cable. You should inspect the individual wires and the strands for any broken wires or excessive wear. If there are any broken wires, strands out of place or excessive wear, the cable should be replaced.
- 6. At the ends of the cable, there is a thimble inside the loop for reinforcement. If the thimble or the swaged fitting at the launch end of the cable is cracked, split, or broken, that piece or the entire cable (in the case of the swaged end) shall be replaced.
- 7. Using the ladder, remove the outer covers from the trolley. Remove the nuts from the bolts that hold the trolley case together and remove one side of the case. Roll the trolley back and forth a few inches on the rope and observe the pulleys. If a pulley does any of the following, replace both pulleys:
  - a. Fails to roll and slides along the rope,
  - b. Has its inner race rotate with the outer part of the pulley,

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- c. Makes a clicking noise, or
- d. Wobbles (make sure it is the pulley, not the mounting bolt moving)
- 8. Inspect the sliders which cover the holes where the rope enters and exits the trolley. If they are broken or worn to less than 3/32" (.094) thick at any point then replace all of the sliders.
- 9. Inspect the pendulum and bronze bearing attached to the trolley which support the seat chain. If the bronze bearing is excessively worn (oblong hole, split or cracked) or missing then replace the bearing.
- 10. Reassemble trolley and replace the covers. Make sure to apply Loctite when reattaching the hardware.
- 11. Check the link at the launch end and the turnbuckle at the arrival end. Both should move freely up and down, left and right. If not then the spherical bearings should be replaced.
- 12. Check the spring assemblies at both ends. Look for broken or bent springs, damage to the plastic parts that secure the springs, missing set screws, and wear of the rubber bumpers. Replace any parts that need it.

Note: All bearings are lubricated for life. If a bearing is worn out then it must be replaced.

### MAINTENANCE

# **Frequency of General Maintenance**

How Often	Check	Swings	Slides	Climbers	Structures	Animals	Whirls
Daily	Open S Hooks	X		Х	Х		
Daily	Broken Anchor Bolts	Х	Х	Х	Х	Х	Х
Daily	Worn Chains	Х		Х	Х		
Daily	Broken Guardrails/Handrails	Х	Х	Х	Х	Х	Х
Daily	Sharp Edges	Х	Х	Х	Х	Х	Х
Daily	Loose or Missing Nuts/Bolts	Х	Х	Х	Х	Х	Х
Daily	Sharp Points/Protrusions	Х	Х	Х	Х	Х	Х
Daily	Unplugged Holes in Pipe	Х	Х	Х	Х	Х	Х
Daily/Weekly	Broken Welds	Х	Х	Х	Х	Х	Х
Daily/Weekly	Inadequate Surfacing	Х	Х	Х	Х	Х	Х
Daily/Weekly	Ropes for cuts or fraying with exposed steel reinforcement strands			Х	Х		
Daily/Weekly	Vandalized or Cracked PVC Coating	Х		Х	Х		
Weekly	Worn Pinions/Clevises	Х		Х	Х		
Weekly	Exposed Footings	Х	Х	Х	Х	Х	Х
Weekly	Worn Bearings	Х			Х		Х
Weekly	Rust of Metal	Х	Х	Х	Х	Х	Х
Weekly	Corrosion of Aluminum	Х	Х	Х	Х	Х	Х
Monthly	Add grease lubrication to wheel bearings	Х			Х		Х
Monthly	Play Mat (integrity and adhesion to surface if applicable)	Х	Х	Х	Х	Х	Х
Spring/Fall	Pinch Points	Х	Х	Х	Х	Х	Х
Inclement Weather (High winds, Snow)	Remove Shade Canopy/ARA Shade				Х		

# MAINTENANCE

# **General Maintenance Checklist**

Date			T	I						
		-								 
Visible cracks, bending, warping		 								
Accessible sharp edges of points		 _								 
Rusted metal surfaces		 								
Rusting of metal and corrosion on										
aluminum		 								
Deformation of open hooks, rings, links,*										
etc.		 _								
Worn swing hangers and chain		 							 	 
Missing or damaged swing seats		 _								<b></b>
Heavy swing seats with sharp corners or*										
edges										
Broken supports/anchors										
Jagged, exposed or cracked and loose										
concrete footing										
Inadequate surfacing material under *										
equipment										
Exposed ends of pipe. Missing caps or *										
plugs										
Protruding bolt ends *										
Chipped or peeling paint										
Cuts or fraying in rope with exposed										
steel reinforcement strands										
Vandalism, broken glass, trash, etc.										
Broken or missing rails, steps, rungs,										
seats										
Loose or missing hardware										
Crush or Shear points *										
Moving components, etc.										
Lack of lubrication on moving parts										
Worn bearings										
Poor drainage areas at footings, slide										
exits, etc										
Vandalized or cracked PVC coating			1							
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\*for further definition, reference ASTM F1487

#### **Directions:**

- 1. Start by reading instructions
- 2. Write in date of inspection
- 3. Check each item of inspection as it applies to your equipment
- 4. Make copy and file with your permanent records

# SUGGESTED PUBLIC PLAYGROUND LEADERS CHECKLIST

- Prepare written guidelines for playground operation, defining goals and procedures.
- Provide for constant supervision by establishing a written schedule.
- Conduct daily cleaning and check for broken glass and other litter.
- Do not permit children to use wet or damaged equipment.
- Constantly observe play patterns to note possible hazards and suggest appropriate equipment or usage changes.
- Prepare written accident reports with special attention to surface conditions, type and extent of injury, age and sex of child, how the accident occurred, and weather conditions.
- Insist on first aid and accident training for playground leaders.
- Instruct children and playground supervisors on how to use equipment. (Playground equipment safety should be taught in the classroom.)
- Do not permit too many children on the same piece of equipment at the same time; suggest that children take turns, or direct their attention toward other equipment or activities.
- Make periodic checkups and request that worn or damaged pieces of equipment be replaced.

BCI Burke Company, LLC

For questions, call us at:

1-800-356-2070

# BCI Burke Generations Warranty<sup>®</sup> The Longest and Strongest warranty in the industry

BCI Burke Company, LLC ("Burke") warrants that all standard products are warranted to be free from defects in materials and workmanship, under normal use and service, for a period of one (1) year from the date of invoice.

# We stand behind our products.

In addition, the following products are warranted, under normal use and service from the date of invoice as follows:

- One Hundred (100) Year Limited Warranty on aluminum and steel upright posts (including Intensity<sup>®</sup>, Voltage<sup>®</sup>, Nucleus<sup>®</sup> and Little Buddies<sup>®</sup>) against structural failure due to corrosion, deterioration or workmanship.
- One Hundred (100) Year Limited Warranty on KoreKonnect<sup>®</sup> clamps against structural failure due to corrosion, deterioration or workmanship.
- One Hundred (100) Year Limited Warranty on Hardware (nuts, bolts, washers).
- One Hundred (100) Year Limited Warranty on bolt-through fastening and clamp systems (Voltage<sup>®</sup>, Intensity<sup>®</sup>, Nucleus<sup>®</sup> and Little Buddies<sup>®</sup>).
- Twenty-Five (25) Year Limited Warranty on spring assemblies and aluminum cast animals.
- Fifteen (15) Year Limited Warranty on main structure platforms and decks, metal roofs, table tops, bench tops, railings, loops and rungs.
- Fifteen (15) Year Limited Warranty on all plastic components including StoneBorders against structural failure due to materials or workmanship.
- Ten (10) Year Limited Warranty on ShadePlay Canopies fabric, threads, and cables against degradation, cracking or material breakdown resulting from ultra-violet exposure, natural deterioration or manufacturing defects. This warranty is limited to the design loads as stated in the specifications.
- Ten (10) Year Limited Warranty on NaturePlay<sup>®</sup> Boulders and GFRC products against structural failure due to natural deterioration or workmanship. Natural wear, which may occur with any concrete product with age, is excluded from this warranty.
- Ten (10) Year Limited Warranty on Full Color Custom Signage against manufacturing defects that cause delamination or degradation of the sign. Full Color Custom Signs also carry a two (2) year warranty against premature fading of the print and graphics on the signs.
- Five (5) Year Limited Warranty on Intensity<sup>®</sup> and RopeVenture<sup>™</sup> cables against premature wear due to natural deterioration or manufacturing defects. Determination of premature wear will be at the manufacturer's discretion.
- Five (5) Year Limited Warranty on swing seats and hangers; Kid Koaster<sup>®</sup> Trolleys and other moving parts against structural failure due to materials or workmanship.
- Three (3) Year Limited Warranty on electronic panel speakers, sound chips and circuit boards against electronic failure caused by manufacturing defects.

The warranty stated above is valid only if the equipment is erected in conformity with the layout plan and/or installation instructions furnished by BCI Burke Company, LLC using approved parts; have been maintained and inspected in accordance with BCI Burke Company, LLC instructions. Burke's liability and your exclusive remedy hereunder will be limited to repair or replacement of those parts found in Burke's reasonable judgment to be defective. Any claim made within the above stated

#### BCI Burke Company, LLC

660 Van Dyne Road • P.O. Box 549 • Fond du Lac, WI 54936-0549 • (920) 921-9220 • 1-800-356-2070 • Fax (920) 921-9566 <u>www.bciburke.com</u> warranty periods must be made promptly after discovery of the defect. A part is covered only for the original warranty period of the applicable part. Replacement parts carry the applicable warranty from the date of shipment of the replacement from Burke. After the expiration of the warranty period, you must pay for all parts, transportation and service charges.

Burke reserves the right to accept or reject any claim in whole or in part. Burke will not accept the return of any product without its prior written approval. Burke will assume transportation charges for shipment of the returned product if it is returned in strict compliance with Burke's written instructions.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IF THE FOREGOING DISCLAIMER OF ADDITIONAL WARRANTIES IS NOT GIVEN FULL FORCE AND EFFECT, ANY RESULTING ADDITIONAL WARRANTY SHALL BE LIMITED IN DURATION TO THE EXPRESS WARRANTIES AND BE OTHERWISE SUBJECT TO AND LIMITED BY THE TERMS OF BURKE'S PRODUCT WARRANTY. SOME STATES DO NOT ALLOW THE EXCLUSION OF CERTAIN IMPLIED WARRANTIES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

Warranty Exclusions: The above stated warranties do not cover: "cosmetic" defects, such as scratches, dents, marring, or fading; damage due to incorrect installation, vandalism, misuse, accident, wear and tear from normal use, exposure to extreme weather; immersion in salt or chlorine water, unauthorized repair or modification, abnormal use, lack of maintenance, or other cause not within Burke's control; and

Limitation of Remedies: Burke is not liable for consequential or incidental damages, including but not limited to labor costs or lost profits resulting from the use of or inability to use the products or from the products being incorporated in or becoming a component of any other product. If, after a reasonable number of repeated efforts, Burke is unable to repair or replace a defective or nonconforming product, Burke shall have the option to accept return of the product, or part thereof, if such does not substantially impair its value, and return the purchase price as the buyer's entire and exclusive remedy. Without limiting the generality of the foregoing, Burke will not be responsible for labor costs involved in the removal of products or the installation of replacement products. Some states do not allow the exclusion of incidental damages, so the above exclusion may not apply to you.

# **Terms of Sale**

**Pricing:** Prices published in this catalog are in USD, are approximate and do not include shipping & handling, surfacing, installation nor applicable taxes.

All prices are subject to change without notice. Contact your Burke representative for current pricing. Payments are to be made in USD.

Weights: Weights are approximate and may vary with actual orders.

**Installation:** All equipment is shipped unassembled. For a list of factory-certified installers in your area, please contact your Burke representative.

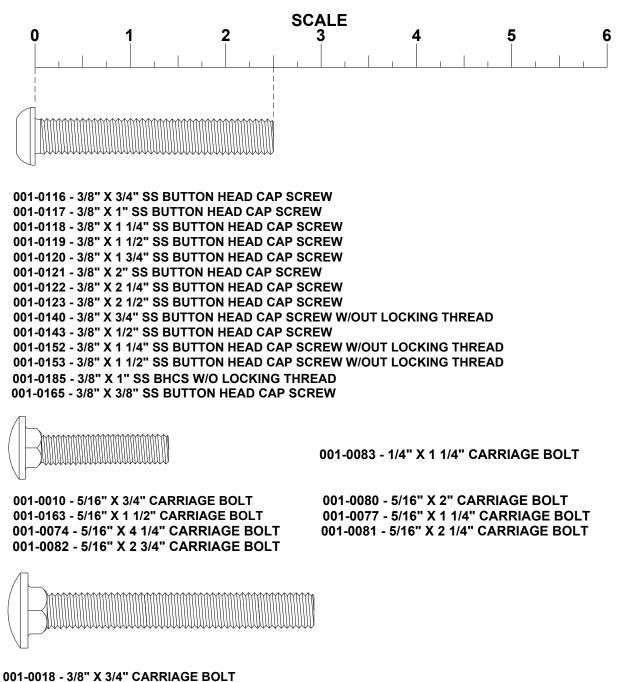
**Specifications:** Product specifications in this catalog were correct at the time of publication. However, product improvements are ongoing at Burke, and we reserve the right to change or discontinue specifications without notice.

**Loss or Damage in Transit:** A signed bill of lading is our receipt from a carrier that our shipment to you was complete and in good condition upon arrival. Before you sign, please check the Bill of Lading carefully when the shipment arrives to make sure nothing is missing and there are no damages. Once the shipment leaves our plant, we are no longer responsible for any damage, loss or shortage.

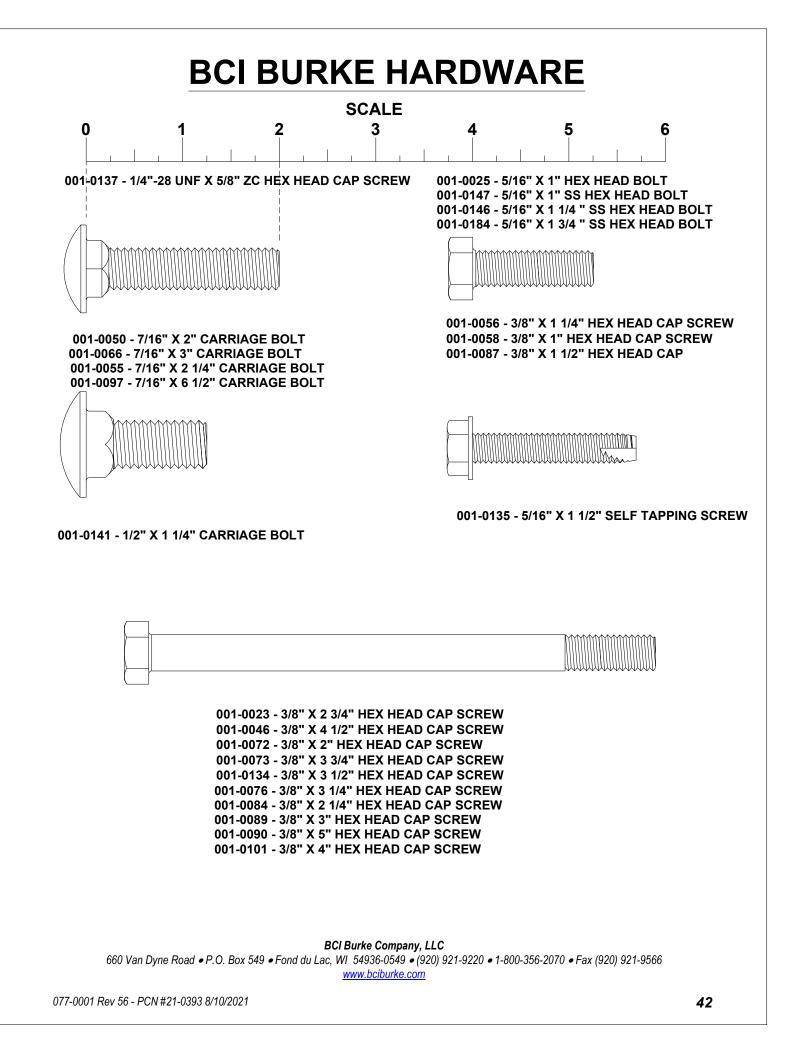
For more information regarding the warranty, call Customer Service at 920-921-9220 or 1-800-356-2070.

# APPENDIX

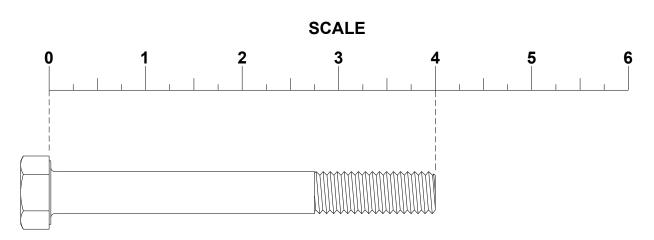
# **BCI BURKE HARDWARE**



001-0018 - 3/8" X 3/4" CARRIAGE BOLT 001-0048 - 3/8" X 2 3/4" CARRIAGE BOLT 001-0098 - 3/8" X 3" CARRIAGE BOLT 001-0053 - 3/8" X 2 1/4" CARRIAGE BOLT 001-0039 - 3/8" X 2 1/2" CARRIAGE BOLT 001-0054 - 3/8" X 2 1/2" CARRIAGE BOLT 001-0068 - 3/8" X 1 1/4" CARRIAGE BOLT



# **BCI BURKE HARDWARE**



001-0096 - 7/16" X 3 1/2" HEX HEAD CAP SCREW 001-0132 - 7/16" X 4" HEX HEAD CAP SCREW 001-0062 - 7/16" X 1 1/4" HEX HEAD CAP SCREW 001-0049 - 7/16" X 4 1/2" HEX HEAD CAP SCREW



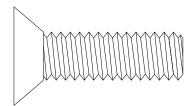
001-0037 - 7/16" X 3" HEX HEAD CAP SCREW - SLOTTED 001-0047 - 7/16" X 4 1/2" HEX HEAD CAP SCREW - SLOTTED

001-0099 - 1/2" X 4 1/2" HEX HEAD CAP SCREW 001-0057 - 1/2" X 1 1/4" HEX HEAD CAP SCREW

001-0160 - 1/2" X 1 1/4" HEX HEAD CAP SCREW - GRADE 8

001-0170 - 1/2" X 5" FULLY THREADED HEX HEAD SCREW

001-0186 - 3/8" X 1 1/4" SS FLAT COUNTERSUNK HEAD CAP SCREW



001-0139 - 1/2" X 1 3/4" SS FLAT COUNTERSUNK HEAD CAP SCREW







002-0003 - 5/16" LOCK NUT

002-0012 - 3/8" LOCK NUT 002-0018 - 3/8" NUT 002-0036 - 3/8" SS NUT

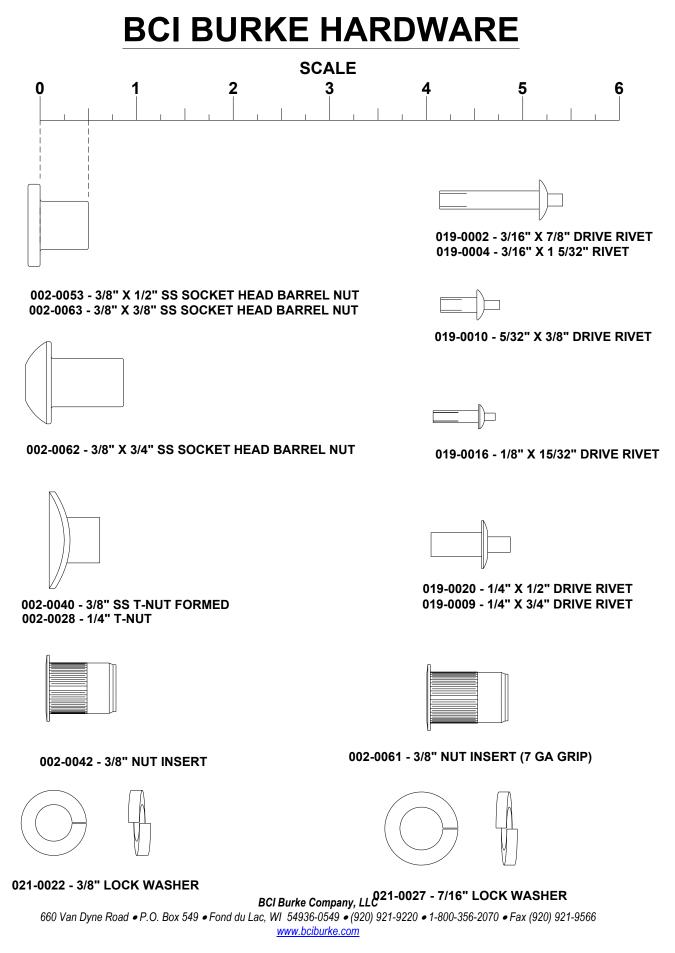
002-0005 - 7/16" LOCK NUT



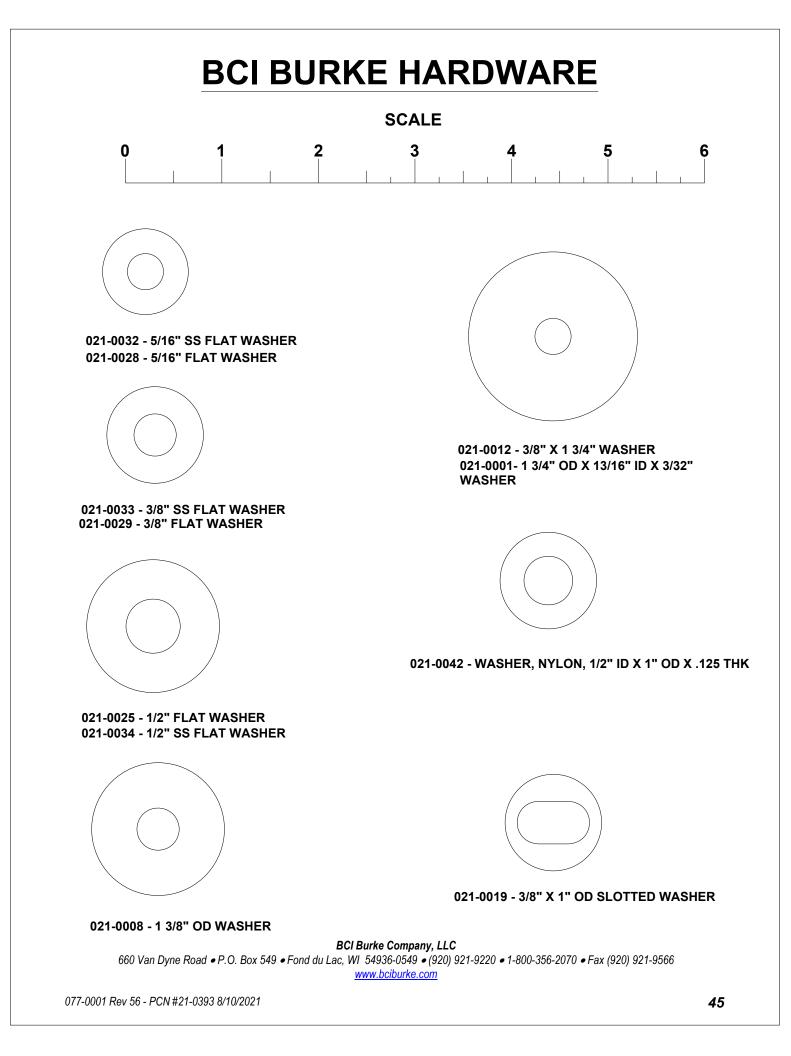
002-0004 - 1/2" LOCK NUT 002-0049 - 1/2" SS LOCK NUT

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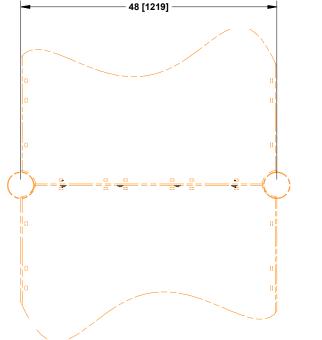


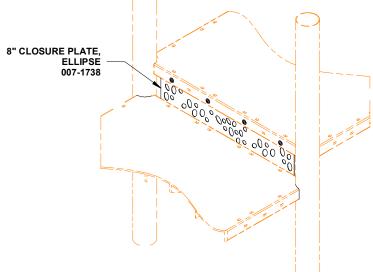
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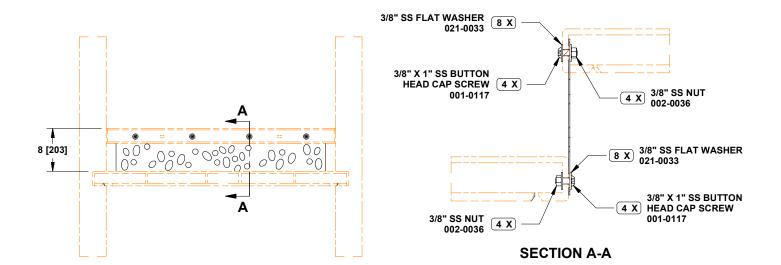


**Installation Instructions** 





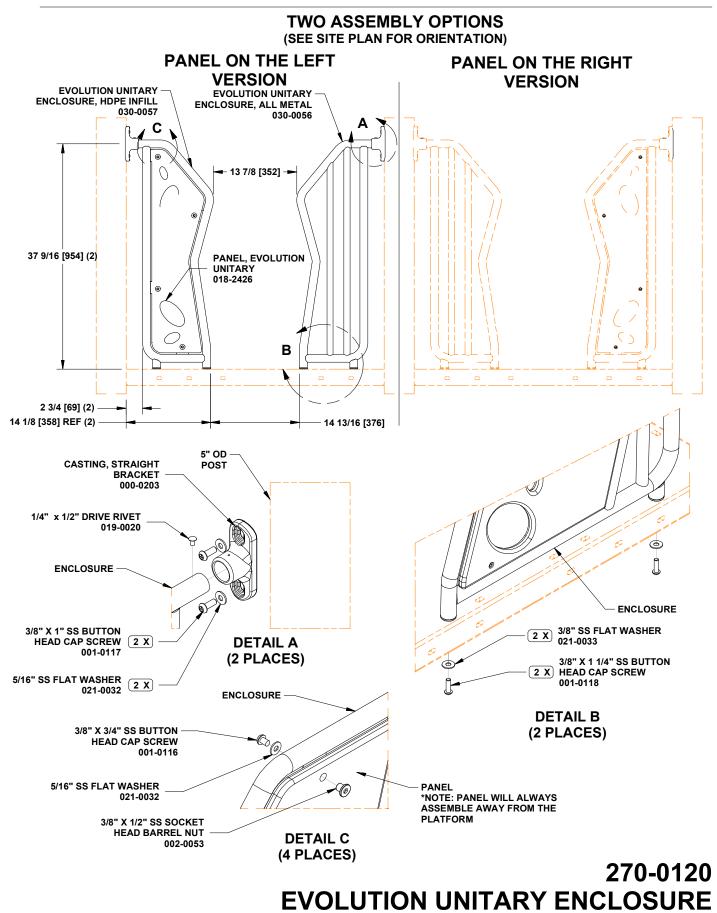




270-0009 8" CLOSURE PLATE, ELLIPSE

	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	QTY	8" CLOSURE PLATE, ELLIPSE: 14 GA galvanized steel plat
	8" CLOSURE PLATE, ELLIPSE	1	finished with a baked-on powder coating.
036-1380	HARDWARE PACKAGE	1	HARDWARE PACKAGES: Stainless steel button head cap screws, washers, and nuts
NOTE: Ha			
	ardware package(s) may include extra	a hardware	
hat is not i	ardware package(s) may include extra necessary for this installation.	a hardware	SHIPPING WEIGHT: 8 LBS.
that is not i	necessary for this installation.		
that is not i	necessary for this installation.		SHIPPING WEIGHT: 8 LBS.
that is not i	necessary for this installation.	TALLATION	
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hat is not i	necessary for this installation.	TALLATION	
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OTE: PVC OTE: DVC OTE: Do I Attach Ensure Tighten	INS Coating may need to be removed not tighten hardware until instruct 8" CLOSURE PLATE, ELLIPSE to upp the nuts are located directly unde hardware.	TALLATION from mounting ted to do so. er and lower pla r the platforms.	INSTRUCTIONS g holes in platforms before installation atform using hardware specifed in SECTION A-A.
IOTE: PVC IOTE: DO I IOTE: Do I Ensure . Tighten	INS Coating may need to be removed not tighten hardware until instruct 8" CLOSURE PLATE, ELLIPSE to upp the nuts are located directly unde hardware.	TALLATION from mounting ted to do so. er and lower pla r the platforms.	INSTRUCTIONS g holes in platforms before installation atform using hardware specifed in SECTION A-A.





P.O. Box 549 Fond du Lac, WI 54936-0549

	PARTS LIST		1 [	SPECIFICATIONS
PART NO.	DESCRIPTION	QTY		CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat-
000-0203	CASTING, STRAIGHT BRACKET	2		Treated. Finished with baked on powder coating.
018-2426	PANEL, EVOLUTION UNITARY	1		PANEL, EVOLUTION UNITARY: 3/4" Extruded HDPE.
030-0056	EVOLUTION UNITARY ENCLOSURE, ALL METAL	1		EVOLUTION UNITARY ENCLOSURE, ALL METAL: One peice all welded construction consisting of 1.315" OD x 12 GA and
030-0057	EVOLUTION UNITARY ENCLOSURE, HDPE INFILL	1		1.029" OD x 14 GA galvanized steel tubing. Finished with baked on powder coating.
036-1544		<u>1</u>		EVOLUTION UNITARY ENCLOSURE, HDPE INFILL: One peice all welded construction consisting of 1.315" OD x 12 GA galvanized steel tubing and 10 GA galvanized steel sheeting. Finished with baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless Steel.
	ardware package(s) may include extra hard necessary for this installation.	aware		SHIPPING WEIGHT: 34 LBS.

#### INSTALLATION INSTRUCTIONS

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

1. Insert CASTING, STRAIGHT BRACKETs onto ends of EVOLUTION UNITARY ENCLOSURE, ALL METAL and EVOLUTION UNITARY ENCLOSURE, HDPE INFILL and fasten the top hole of castings to the posts using hardware specified in DETAIL A.

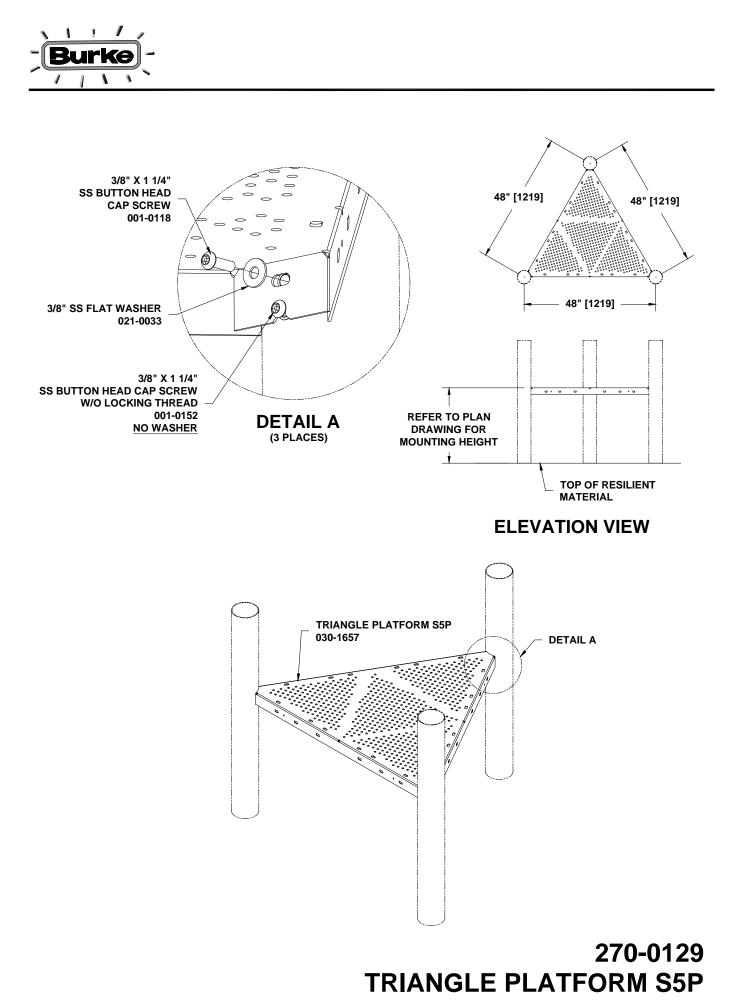
2. Rotate unitary enclosures up 90 degrees and fasten bottom hole of castings to posts using hardware specified in DETAIL A.

3. Rotate unitary enclosures down 90 degrees and attach to platform using hardware specified in DETAIL B.

4. Drill 1/4" diameter hole through the castings and enclosures, using the pilot hole in the castings. Drive in rivet, as specified in DETAIL A, until center pin is flush.

5. Attach PANEL, EVOLUTION UNITARY to enclosure using hardware specified in DETAIL C. Panel should be on the side away from the platform.

6. Tighten all hardware.



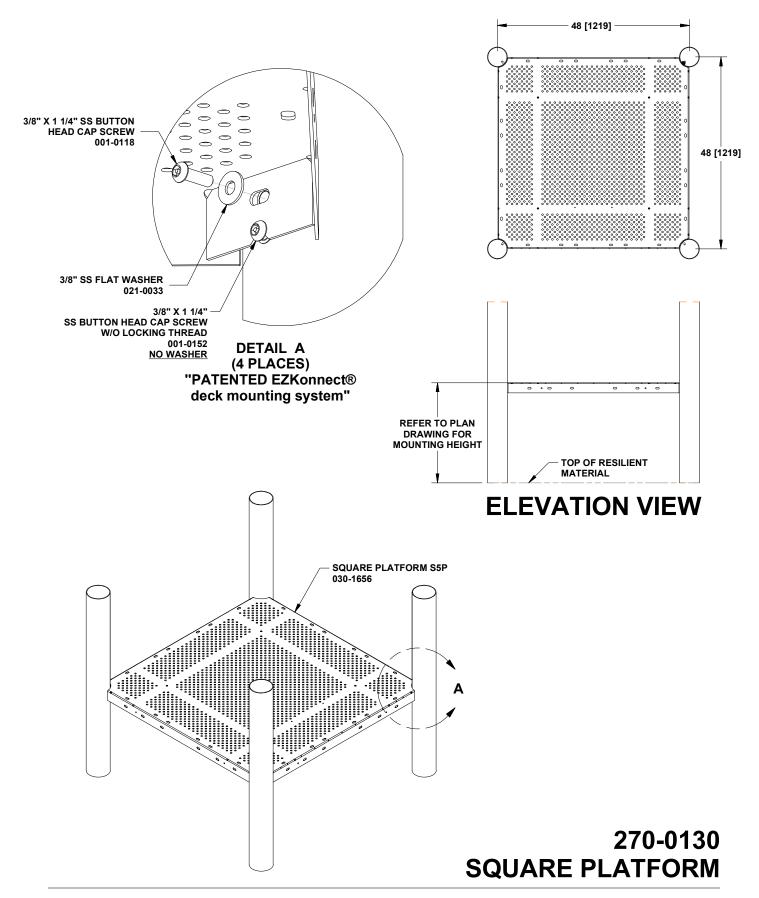
	— PARTS LIST —		SPECIFICATIONS
PART NO. 030-1657 036-1100	PARTS LIST DESCRIPTION TRIANGLE PLATFORM S5P HARDWARE PACKAGE	<u>QTY</u> 1 1	SPECIFICATIONS TRIANGLE PLATFORM S5P: 12 GA HRPO sheet, finished with a PVC Coating HARDWARE PACKAGE: Stainless steel
Note: Hardv that is not n	vare package(s) may include extra ecessary for this installation.	hardware	SHIPPING WEIGHT: 48 LBS.

#### INSTALLATION INSTRUCTIONS

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Locate the double sets of platform mounting holes in each post.
- 2. Partially thread a 3/8" x 1 1/4" SS button head cap screw W/O LOCKING THREAD into the lower hole of the double set of mounting holes WITHOUT a washer. **DO NOT TIGHTEN**. See DETAIL A.
- 3. Slide the three corners of the TRIANGLE PLATFORM S5P on the partially threaded cap screws on each post.
- 4. Complete attaching platform to posts by using 3/8" x 1 1/4" SS button head cap screws and 3/8" SS flat washers to secure platform into upper mounting hole. See DETAIL A.
- 5. Level platform and plumb posts.
- 6. Tighten all hardware.
- 7. Pour concrete. Let set for two to three days.
- 8. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	QTY	SQUARE PLATFORM S5P: 12 GA HRPO sheet, finished with a
030-1656	SQUARE PLATFORM S5P	1	PVC Coating.
036-1101	HARDWARE PACKAGE	1	HARDWARE PACKAGE: Stainless steel.
NOTE: Hai	rdware package(s) may include extra ha ecessary for this installation.	ardware	SHIPPING WEIGHT: 106 LBS.
			hales of words hadens installation
NOTE: PVC	coating may need to be removed fro	m mounting	noles of parts before installation.

NOTE: Do not tighten hardware until instructed to do so.

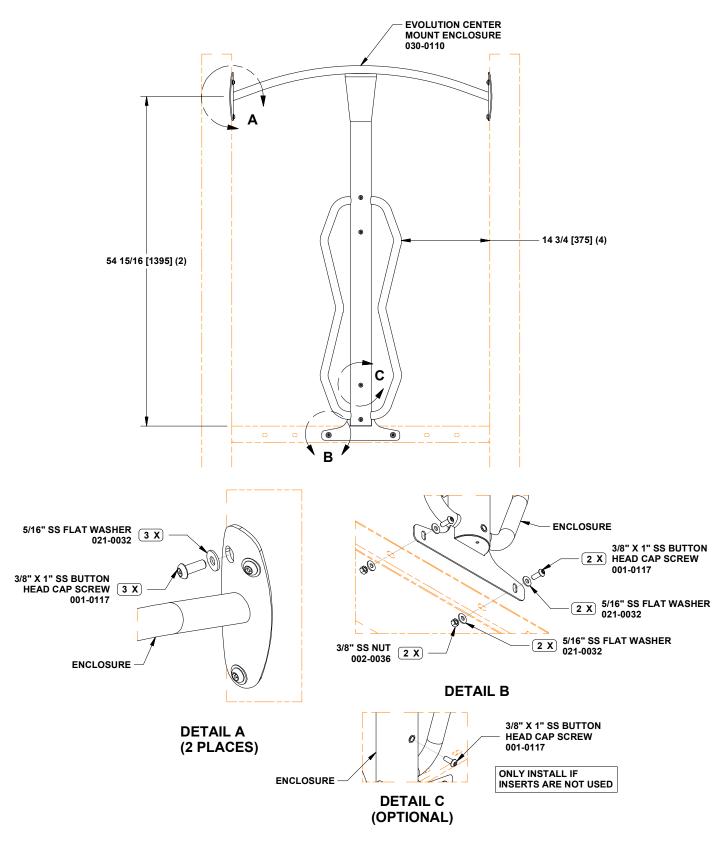
- 1. Locate the double sets of platform mounting holes in each post.
- Attach with patented EZKonnect® deck mountiing system. Partially thread a 3/8" x 1 1/4" SS button head cap screw
   W/O LOCKING THREAD into the lower hole of the double set of mounting holes WITHOUT a washer.

DO NOT TIGHTEN. See DETAIL A.

- 3. Slide the four corners of the SQUARE PLATFORM onto the partially threaded cap screws on each post.
- Complete attaching platform to posts by using 3/8" x 1 1/4" SS button head cap screws and 3/8" SS flat washers to secure platform into upper mounting hole. See DETAIL A.
- 5. Level platform and plumb posts.
- 6. Tighten all hardware.
- 7. Pour concrete. Let set for two to three days.
- 8. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.



# 270-0292 EVOLUTION CENTER MOUNT ENCLOSURE

P.O. Box 549 Fond du Lac, WI 54936-0549

	PARTS LIST		ם ה	
PART NO.	DESCRIPTION	QTY		EVOLUTION CENTER MOUNT ENCLOSURE: One piece all
030-0110	EVOLUTION CENTER MOUNT ENCLOSURE	1		welded construction consisting of 3.5" OD x 11 GA and 1.315" OD x 12 GA galvanized steel tubing, 10 GA galvanized steel plating, and 7 GA stainless steel plating. Finished with a baked
036-0258	HARDWARE PACKAGE	5		on powder coating.
036-2006	HARDWARE PACKAGE	1		HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless
				Steel.
	ardware package(s) may include extra hard necessary for this installation.	ware		SHIPPING WEIGHT: 40 LBS.

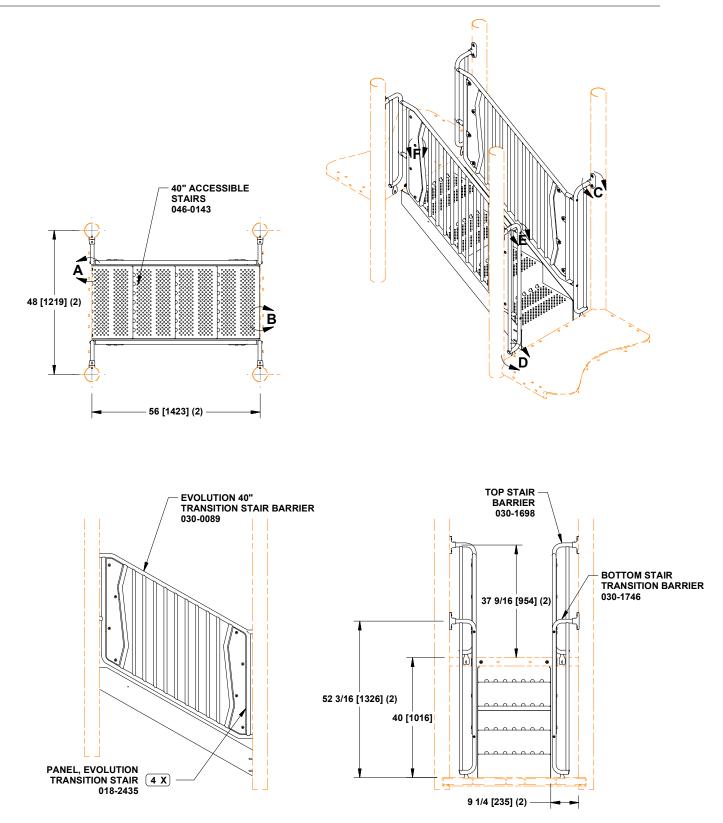
#### INSTALLATION INSTRUCTIONS

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Attach EVOLUTION CENTER MOUNT ENCLOSURE to posts using hardware specified in DETAIL A.
- 2. Attach bottom of enclosure to platform using hardware specified in DETAIL B.
- 3. (Optional) Plug any unused threaded inserts using hardware specified in DEATAIL C.
- 4. Tighten all hardware.



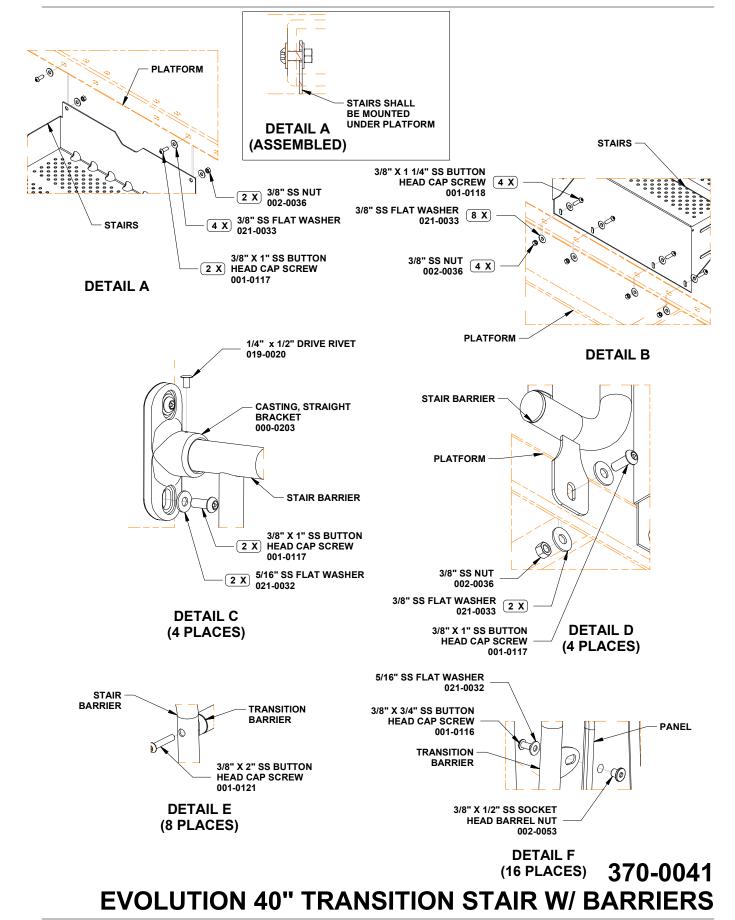
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.



# 370-0041 EVOLUTION 40" TRANSITION STAIR W/ BARRIERS

P.O. Box 549 Fond du Lac, WI 54936-0549





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PART NO.	DESCRIPTION	QTY
000-0203	CASTING, STRAIGHT BRACKET	4
018-2435	PANEL, EVOLUTION TRANSITION STAIR	4
030-0089	EVOLUTION 40" TRANSITION STAIR BARRIER	2
030-1698	TOP STAIR BARRIER	2
030-1746	BOTTOM STAIR TRANSITION BARRIER	2
036-0877	HARDWARE PACKAGE	8
036-1125	HARDWARE PACKAGE	1
046-0143	40" ACCESSIBLE STAIRS	1

SPECIFICATIONS

<u>CASTING, STRAIGHT BRACKET</u>: A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating.

PANEL, EVOLUTION TRANSITION STAIR: 3/4" Extruded HDPE.

EVOLUTION 40" TRANSITION STAIR BARRIER; TOP STAIR BARRIER; BOTTOM STAIR TRANSITION BARRIER: One piece all welded construction consisting of 1.315" OD x 12 GA and 1.029" OD x 14 GA galvanized steel tubing, and 10 GA galvanized steel plate. Finished with a baked on powder coating.

HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless Steel.

<u>40" ACCESSIBLE STAIRS</u>: One piece all welded construction consisting of 12 GA HRPO steel surfaces, sides, and gussets. PVC coated after fabrication.

**NOTE:** Hardware package(s) may include extra hardware that is not necessary for this installation.

SHIPPING WEIGHT: 301 LBS.

#### INSTALLATION INSTRUCTIONS

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

1. Attach 40" ACCESSIBLE STAIRS to upper platform using hardware specified in DETAIL A. **NOTE: Make sure the stairs are centered between the posts.** 

2. Attach stairs to lower platform using hardware specified in DETAIL B. **NOTE: Make sure the stairs are centered between the posts.** 

3. Attach CASTING, STRAIGHT BRACKET to posts using hardware specified in DETAIL C.

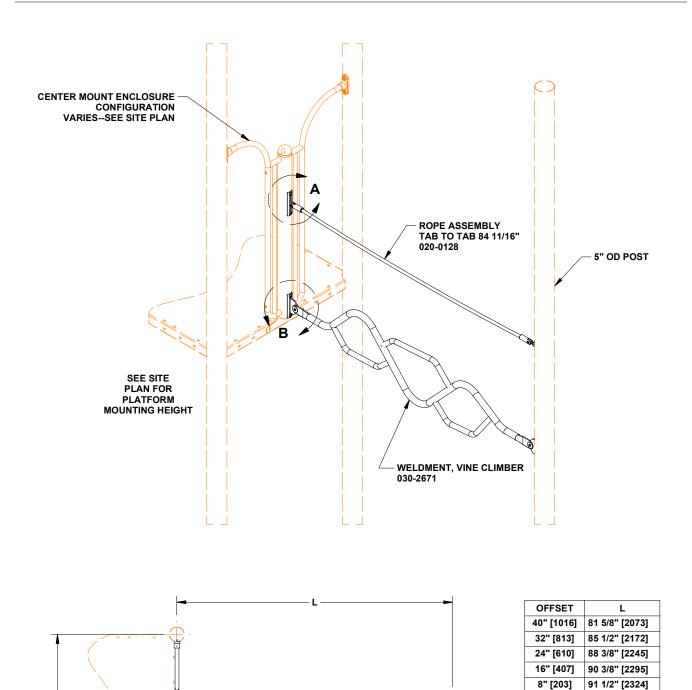
4. Sleeve TOP STAIR BARRIER and BOTTOM STAIR TRANSITION BARRIER into the castings shown in DETAIL C. Attach the stair barriers to the platforms using hardware specified in DETAIL D.

Attach EVOLUTION 40" TRANSITION STAIR BARRIER to the top and bottom barrier using hardware specified in DETAIL E.
 Attach PANEL, EVOLUTION TRANSITION STAIR to evolution barrier using hardware specified in DETAIL F. Panels should

attach on the side away from the stairs.

7. Tighten all hardware.

8. Drill 1/4" diameter hole through the castings and barriers, using the pilot hole in the castings. Drive in rivet, as specified in DETAIL C, until center pin is flush.



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.

## 370-0171 TRANGO CLIMBER, CENTER MOUNT TO POST

**BCI Burke Company, LLC** 

48 [1219]

Burke.

91 7/8" [2334]

91 1/2" [2324]

90 3/8" [2295]

85 1/2" [2172]

-24" [-610] 88 3/8" [2245]

-40" [-1016] 81 5/8" [2073]

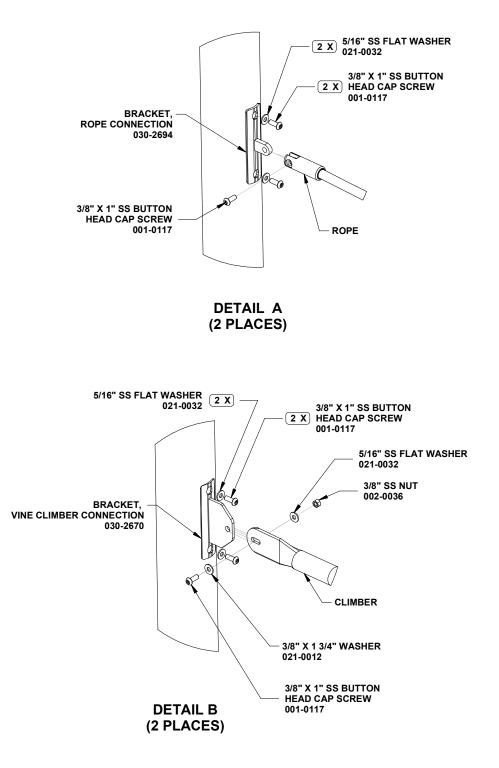
0" [0]

-8" [-203]

-16" [-407]

-32" [-813]





370-0171 TRANGO CLIMBER, CENTER MOUNT TO POST

**BCI Burke Company, LLC** 

P.O. Box 549 Fond du Lac, WI 54936-0549

	PARTS LIST	SPECIFICATIONS	
PART NO.	DESCRIPTION	QTY	ROPE ASSEMBLY, TAB TO TAB 84 11/16": Rope consists of 6 right hand, regula
I 020-0128 I	ROPE ASSEMBLY, TAB TO TAB 84 11/16"	1	lay strands, closed around a synthetic fiber core, with each preformed strand consisting of 8 galvanized steel wires tightly covered with polyester fibers. Aluminum end connectors and ferrules.
1 030-2670 L	BRACKET, VINE CLIMBER CONNECTION	2	BRACKET, ROPE CONNECTION; BRACKET VINE CLIMBER CONNECTION: One piece all welded construction consisting of a formed 3/16" stainless steel plate
030-2671	WELDMENT, VINE CLIMBER	1	and a 8 GA galvanized steel sheet. Finished with a baked on powder coating.
030-2694	BRACKET, YOKE CONNECTION 1 3/4" X 7 1/4"	2	WELDMENT, VINE CLIMBER: One piece all welded construction consisting of 1.660" OD x 12 GA & 1.315" OD x 12 GA galvanized steel tubing. Finished with a baked on powder coating.
036-0040	HARDWARE PACKAGE	3	
036-0879	HARDWARE PACKAGE	1	BRACKET, YOKE CONNECTION 1 3/4" X 7 1/4": One piece all welded
036-2006	HARDWARE PACKAGE	2	construction consisting of 3/8" thick stainless steel and formed 7 GA stainless steel sheet. Finished with a baked on powder coating.
	rdware package(s) may include extra hard necessary for this installation.	ware	HARDWARE PACKAGE: Stainless steel. HARDWARE PACKAGE; HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless steel. SHIPPING WEIGHT: 34 LBS.

#### NOTE: Don't attach hardware until instructed to do so.

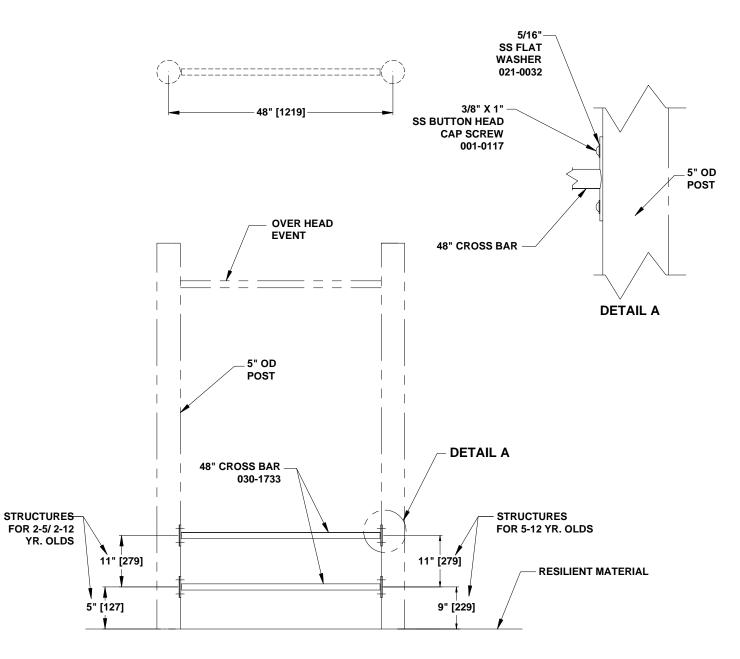
1. Attach ROPE ASSEMBLY to BRACKET, YOKE CONNECTION and WELDMENT, VINE CLIMBER to BRACKET, VINE CLIMBER CONNECTION using hardware specified in DETAILS A & B.

- 2. Tighten all hardware.
- 3. Spray drive rivet locations with touch-up paint.

4. Install resilient material in accordance to installation guidelines, ASTM standards, and CPSC guidelines.

370-0171 TRANGO CLIMBER, CENTER MOUNT TO POST REV: 00 PCN: 20-0205 6/18/2020



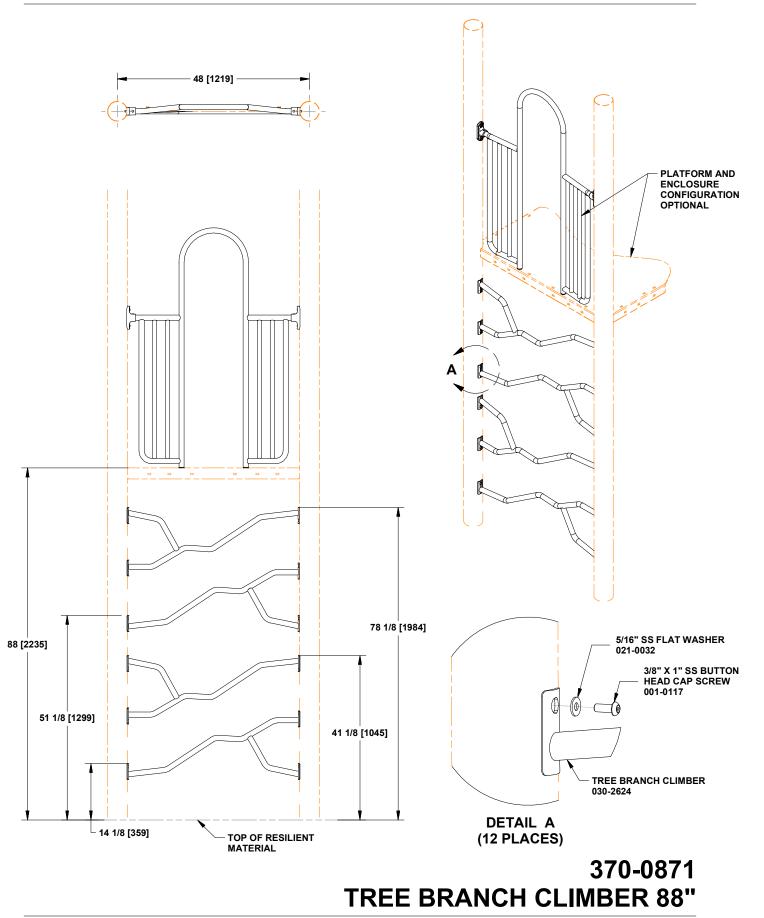




	PARTS LIST		SPECIFICATIONS
PART NO. 030-1733 036-0258	PARTS LIST <u>DESCRIPTION</u> 48" CROSS BAR HARDWARE PACKAGE	QTY 2 4	SPECIFICATIONS <u>48" CROSS BAR</u> : One piece all welded construction consisting of 1.315" OD, 14 GA galvanized steel tubing and 7 GA stainless steel plate. Finished with a baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless steel.
that is not no	ecessary for this installation.		SHIPPING WEIGHT: 10 LBS.
		INSTALLATION	INSTRUCTIONS

1. Attach 48" CROSS BAR to 5" O.D. post using 3/8" x 1" SS button head cap screw and 5/16"SS flat washers. Tighten all bolts. 2. Install resilient surfacing material.





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PARTS LIST		] [	SPECIFICATIONS
 PARTS LIST         DESCRIPTION         TREE BRANCH CLIMBER         HARDWARE PACKAGE	QTY 4 4		SPECIFICATIONS TREE BRANCH CLIMBER: One piece all welded construction consisting of 1.315" OD x 12 GA galvanized steel tubing, and 7 GA stainlees steel sheet. Finished with a baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless Steel.
rdware package(s) may includ necessary for this installation.	le extra hardware		SHIPPING WEIGHT: 33 LBS.

NOTE: Do not tighten hardware until instructed to do so.

1. Locate correct post to assemble climber to, from site plan.

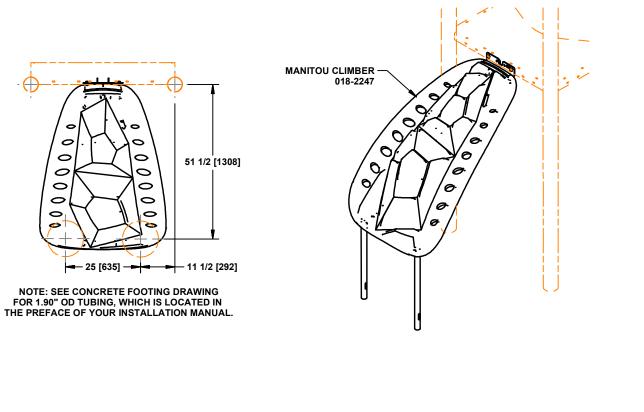
2. Attach climber to post using hardware specified in DETAIL A. Repeat for remaining climbers.

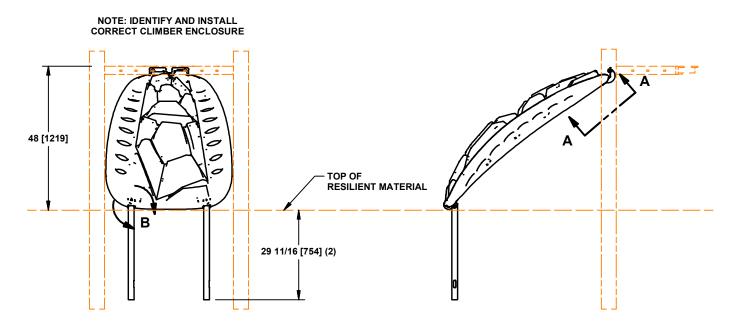
3. Tighten all hardware.

4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

370-0871 TREE BRANCH CLIMBER 88" REV: 00 PCN: 18-0259 10/8/2018

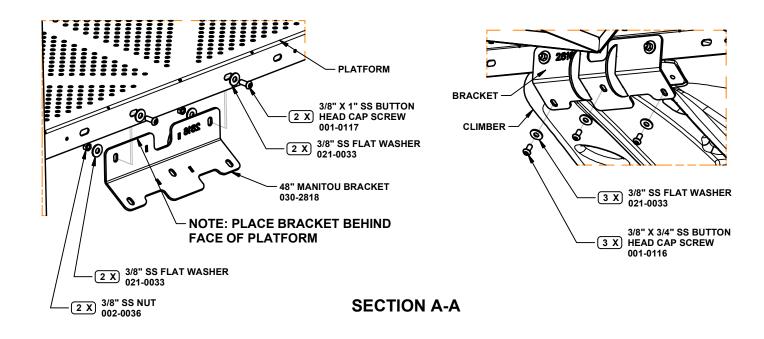


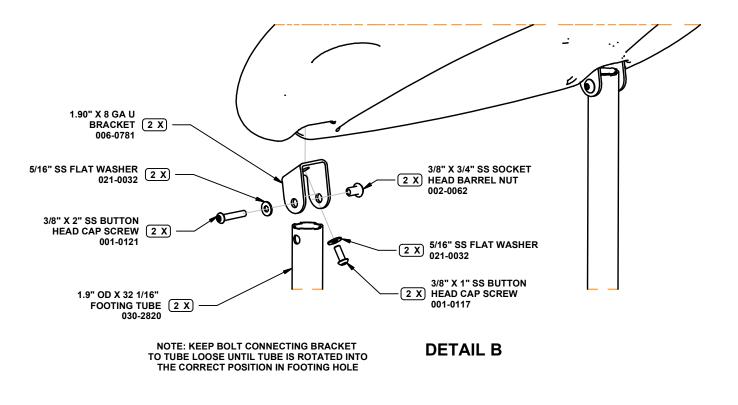




# 370-1645 MANITOU CLIMBER 48"







### 370-1645 MANITOU CLIMBER 48"

	PARTS LIST		11	SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>		1.90" X 8 GA U BRACKET: Formed 8 GA galvanzied sheet
006-0781	1.90" X 8 GA U BRACKET	2		finished with a baked-on powder coat.
018-2247	MANITOU CLIMBER	1		MANITOU CLIMBER: 1/4" thick, linear, low density, rotationally
030-2818	48" MANITOU BRACKET	1		molded, U.V. stabilized polyethylene with double wall
030-2820	1.9" OD X 32 1/16" FOOTING TUBE	2		construction, molded in 3/8" T-nut inserts, and a textured surface.
036-2060	HARDWARE PACKAGE	1		sunace.
				<ul> <li><u>48" MANITOU BRACKET:</u> One piece welded construction consisting of formed 8 GA galvanized sheet steel finished with a baked-on powder coat.</li> <li><u>1.9" OD X 32 1/16" FOOTING TUBE:</u> One piece welded construction consisting of 1.90" OD X 11 GA galvanized steel tubing and a 12 GA galvanized steel cap finished with a baked-on powder coat.</li> <li><u>HARDWARE PACKAGE:</u> Stainless Steel</li> </ul>
	ardware package(s) may include extra harc necessary for this installation.	lware		SHIPPING WEIGHT: 87 LBS.
	INSTAL		1 1	
Note: PVC 1. Locate preface of y 2. Attach 3. Attach	your installation manual. 48" MANITOU BRACKET to back of platfor	<b>g slots of</b> fied in TO m using ha CLIMBER	P ∨ ard usi	/IEW. Refer to typical concrete footer guidelines located in the ware specified in SECTION A-A. ng hardware specifed in DETAIL B. Note: This may be a tight fit

4. Tighten Hardware

5. Attach 1.9" OD X 32 1/16" FOOTING TUBES to 1.90" X 8 GA U BRACKETS using hardware specified in DETAL B.

NOTE: Leave bolts from step 5 loose until climber is attached and footing tubes are placed in footer holes.

6. Attach climber assembly to 48" MANITOU BRACKET using hardware specifed in SECTION A-A.

7. Block up, level and plumb assembly.

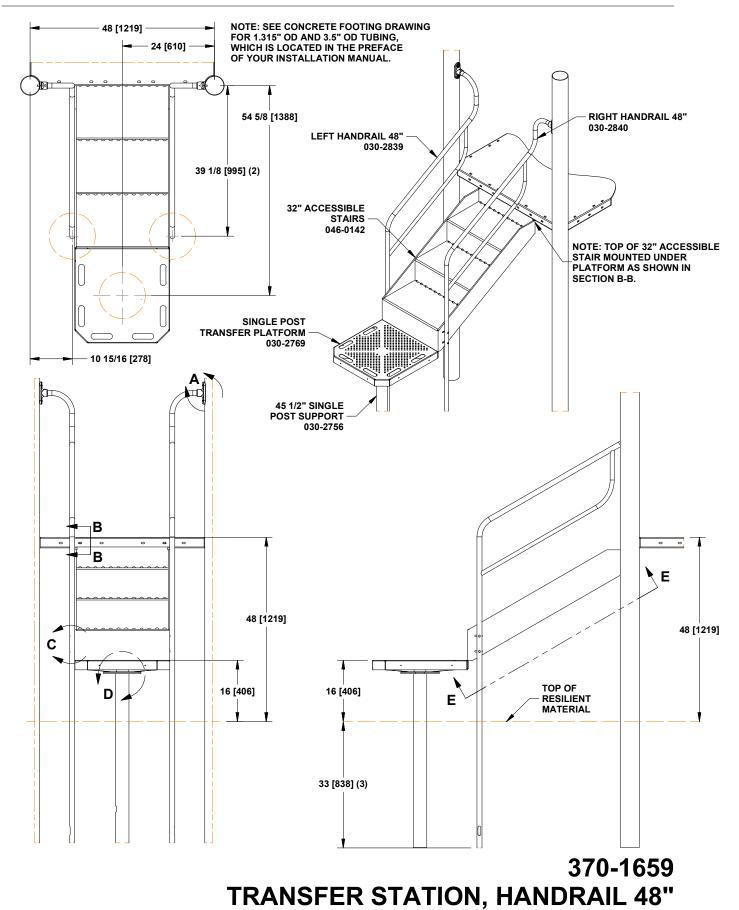
8. Tighten all hardware

9. Pour concrete and allow concrete set for 2-3 days.

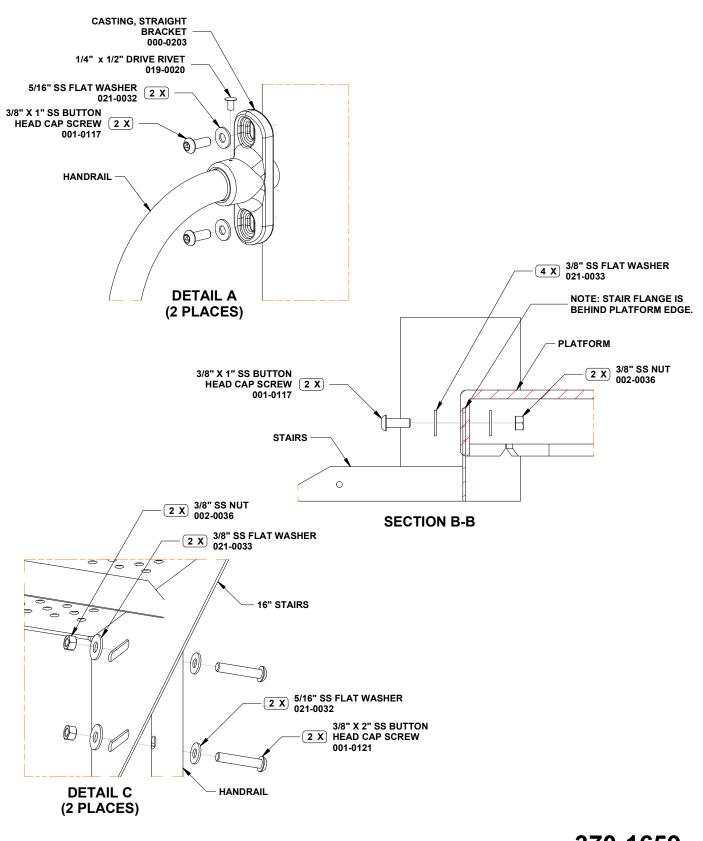
10. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



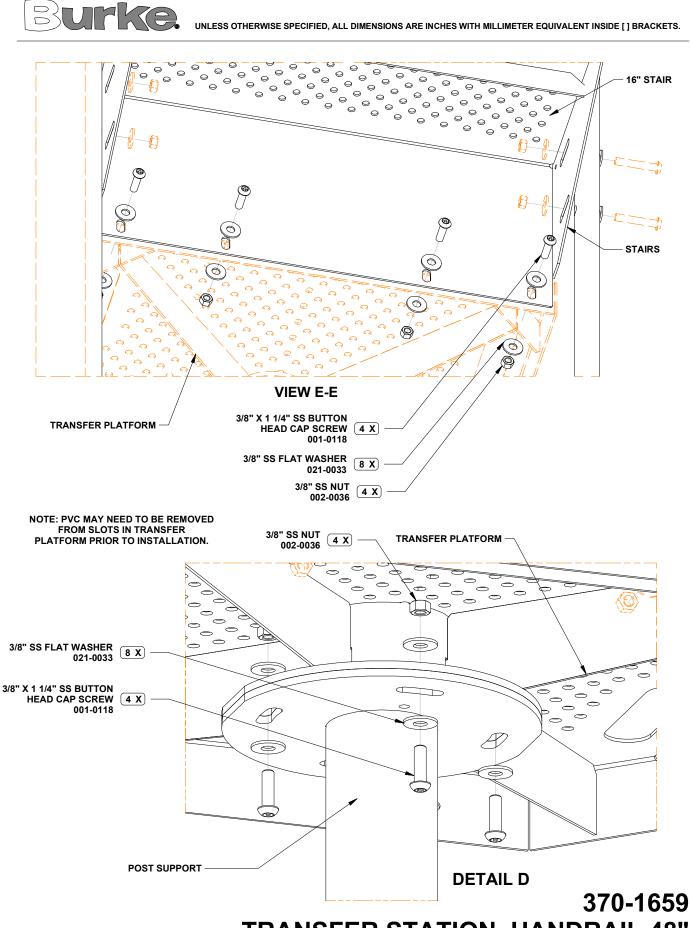
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.







## 370-1659 TRANSFER STATION, HANDRAIL 48"



# **TRANSFER STATION, HANDRAIL 48"**

PARTS LIST							
PART NO.	DESCRIPTION	<u>QTY</u>					
000-0203	CASTING, STRAIGHT BRACKET	2					
030-2756	45 1/2" SINGLE POST SUPPORT	1					
030-2769	SINGLE POST TRANSFER PLATFORM	1					
030-2839	LEFT HANDRAIL 48"	1					
030-2840	RIGHT HANDRAIL 48"	1					
036-0819	HARDWARE PACKAGE	1					
036-1519	HARDWARE PACKAGE	1					
046-0142	32" ACCESSIBLE STAIRS	1					
NOTE: Hat that is not	<b><u>NOTE:</u></b> Hardware package(s) may include extra hardware that is not necessary for this installation.						

#### SPECIFICATIONS

CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating.

45 1/2" SINGLE POST SUPPORT: One piece welded construction consisting of 3.5" OD X 11 Ga galvanized tubing and a 1/4" HRS mounting plate finished with a baked-on powder coat.

SINGLE POST TRANSFER PLATFORM: One piece welded construction consisting of 12 GA sheet steel, 1/4" HRS mounting plate and 4 1/2" X 11 Ga steel tubing finished with a PVC dipped coating.

LEFT HANDRAIL 48"; RIGHT HANDRAIL 48": One piece all welded construction consisting of 1.315" OD x 12 GA & 1.029" OD x 12 GA galvanized steel tubing and 10 GA galvanized steel plate. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel screws, nuts and washers. Aluminum rivets.

32" ACCESSIBLE STAIRS: One piece all welded construction consisting of 12 GA HRPO steel surfaces, sides, and gussets. PVC coated after fabrication.

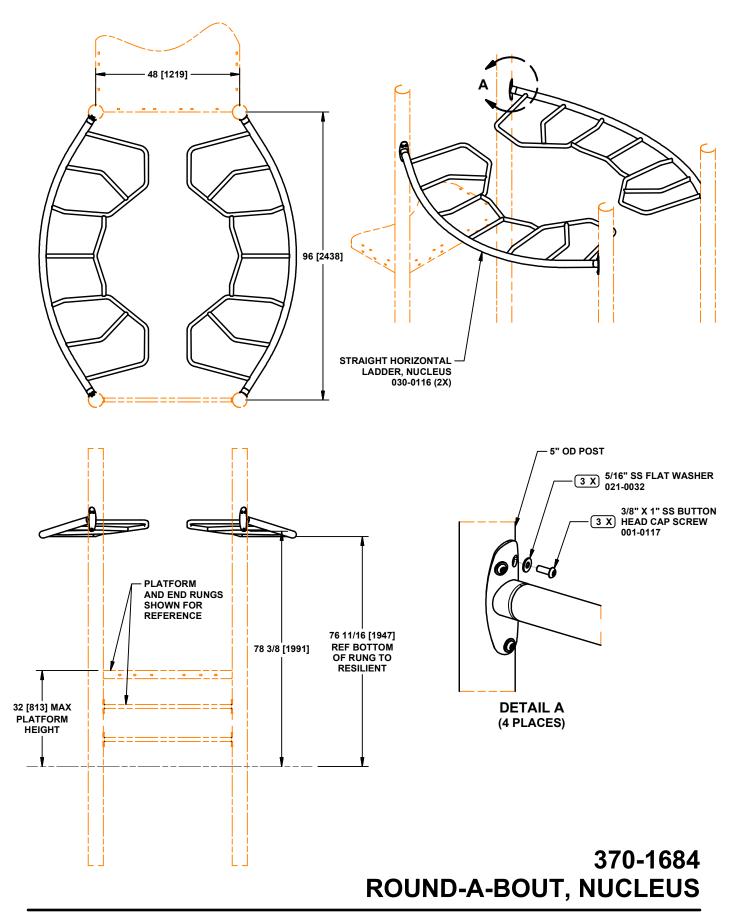
SHIPPING WEIGHT: 210 LBS.

### INSTALLATION INSTRUCTIONS

NOTE: Do not tighten hardware until instructed to do so. NOTE: PVC coating may need to be removed from mounting slots of platforms before installation.

- 1. Install PLATFORMS. See appropriate installation instructions.
- 2. Dig footing holes per dimensions shown. See typical concrete footing drawings for 1.315" OD and 5" OD tubing, which are located in the preface of your installation manual.
- 3. Attach 32" ACCESSIBLE STAIR to PLATFORM using hardware as shown in SECTION B-B. NOTE: The heads of the 3/8" x 1" SS BUTTON HEAD CAP SCREWS must be on the platform side.
- 4. Attach 48" HANDRAILS, with castings, to 5" OD POSTS using hardware as shown in DETAIL A.
- 5. Attach 48" HANDRAILS to 32" ACCESSIBLE STAIR using hardware indicated in DETAIL C.
- 6. Attach 45 1/2" SINGLE POST SUPPORT to SINGLE POST TRANSFER PLATFORM using hardware shown in DETAIL D.
- 7. Attach 32" ACCESSIBLE STAIRS to transfer platform using hardware as shown in VIEW E-E.
- 9. Tighten all hardware.
- 10. Block up, plumb and level assembly.
- 11. Pour concrete and allow concrete to set for 2-3 days.
- 12. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





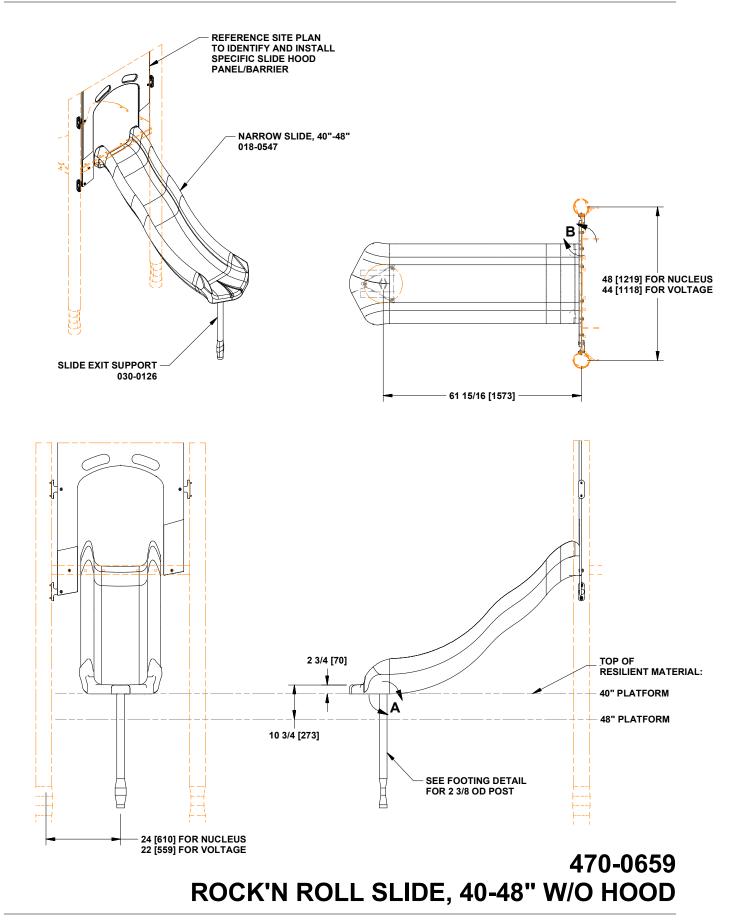
	PARTS LIST		Γ	SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>		STRAIGHT HORIZONTAL LADDER, NUCLEUS: One piece all
030-0116	STRAIGHT HORIZONTAL LADDER, NUCLEUS	2		welded construction consisting of 2 $3/8"$ OD x 10 GA, 2 $3/8"$ OD x 12 GA, and 1.315" OD x 12 GA galvanized steel tubing, and $3/16"$ thick stainless steel plate. Finished with a baked on
036-0040	HARDWARE PACKAGE	4		powder coating.
	ardware package(s) may include extra hard necessary for this installation.	dware		HARDWARE PACKAGE: Stainless steel SHIPPING WEIGHT: 114 LBS.

NOTE: Do not tighten hardware until instructed to do so. NOTE: See site layout drawing for correct orientation.

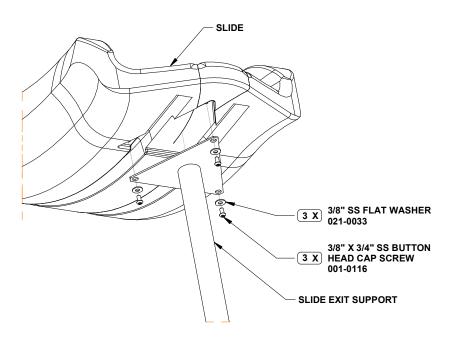
- 1. Attach STRAIGHT HORIZONTAL LADDER, NUCLEUS to posts using hardware specified in DETAIL A.
- 2. Plumb posts and level center rung. Tighten all hardware.
- 3. Pour concrete and let set for 2 to 3 days.
- 4. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



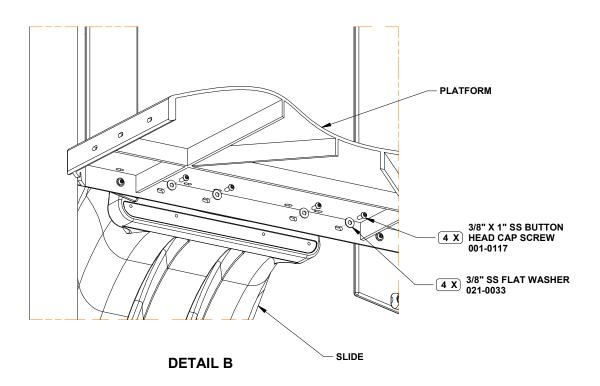
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.







**DETAIL A** 



## 470-0659 ROCK'N ROLL SLIDE, 40-48" W/O HOOD

	PARTS LIST		SPECIFICATIONS
PART NO. 018-0547 030-0126 036-1393	DESCRIPTION NARROW SLIDE, 40"-48" SUPPORT, SLIDE EXIT HARDWARE PACKAGE	QTY 1 1 1	SPECIFICATIONS           NARROW SLIDE, 40"-48"; SLIDE HOOD, NARROW SLIDES: 1/4"           thick, linear, low density, rotationally molded, U.V. stabilized           polyethylene with double wall construction, molded in 3/8" T-nut inserts,           and a textured surface.           SUPPORT, SLIDE EXIT: One piece all welded construction consisting           of 2 3/8" OD x 12 GA galvanized steel tubing and 8 GA galvanized           sheet steel. Finished with a baked on powder coating.           HARDWARE PACKAGE: Stainelss steel.
	ardware package(s) may include extra l necessary for this installation.	naruware	SHIPPING WEIGHT: 71 LBS.
		]	

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

1. After platform and slide hood panel/barrier have been installed, locate and dig footing hole as per dimensions shown. See footing detail drawing, which is located in the preface of your installation manual.

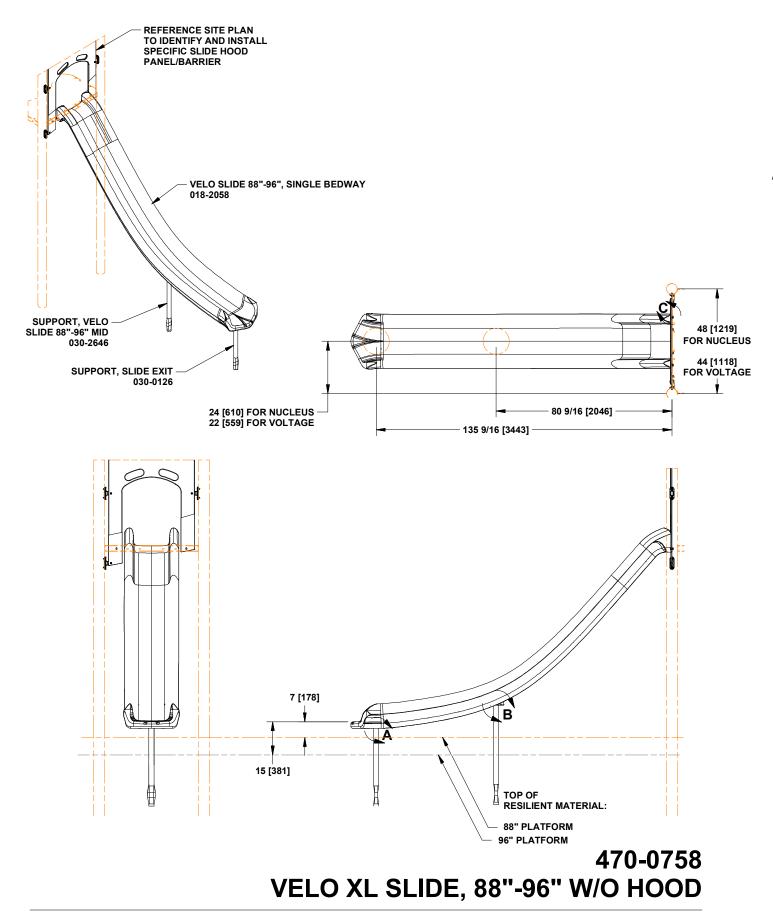
2. Attach SLIDE EXIT SUPPORT to NARROW SLIDE using hardware specified in DETAIL A. Tighten fasteners.

3. Position slide into footing holes. Attach slide to platform using hardware specified in DETAIL B. Make sure that the slide is flush and tight to platform.

- 4. Tighten all hardware.
- 5. Block-up, level and plumb.
- 6. Pour concrete. Let set for two to three days.

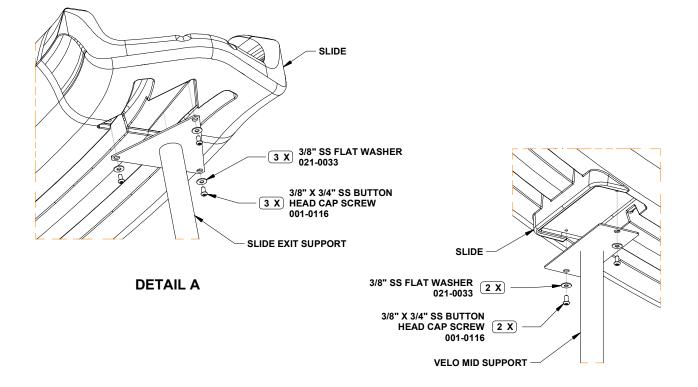
7. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



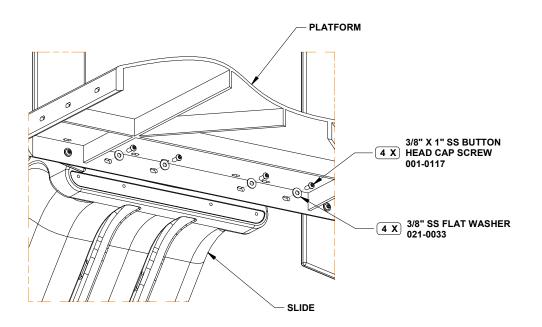


P.O. Box 549 Fond du Lac, WI 54936-0549





DETAIL B





470-0758 VELO XL SLIDE, 88"-96" W/O HOOD

	PARTS LIST		] [	SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>		VELO SLIDE 88"-96", SINGLE BEDWAY: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall
018-2058	VELO SLIDE 88"-96", SINGLE BEDWAY	1		construction, molded in 3/8" T-nut inserts, and a textured surface.
030-0126	SUPPORT, SLIDE EXIT	1		
030-2646	SUPPORT, VELO SLIDE 88"-96" MID	1		SUPPORT, SLIDE EXIT: One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and 8 GA galvanized
036-1393	HARDWARE PACKAGE	1		sheet steel. Finished with a baked on powder coating.
				SUPPORT, VELO SLIDE 88"-96" MID: One piece all welded construction consisting of 10 GA galvanized steel plate and 2 3/8" OD x 12 GA galvanized steel tubing. Finished with a baked on powder coating.
				HARDWARE PACKAGE: Stainless steel.
	ardwara paakaga(a) may inalyda avtra hard	wara		
	ardware package(s) may include extra hard necessary for this installation.	ware		SHIPPING WEIGHT: 134 LBS.

#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

1. After platform and slide hood panel/barrier have been installed, locate and dig footing hole as per dimensions shown. See footing detail drawing, which is located in the preface of your installation manual.

2. Attach SLIDE EXIT SUPPORT to VELO SLIDE using hardware specified in DETAIL A. Tighten fasteners.

3. Attach SUPPORT, VELO SLIDE 88"-96" MID to slide using hardware specified in DETAIL B. Tighten fasteners.

4. Position slide into footing holes. Attach slide to platform using hardware specified in DETAIL C. Make sure that the slide is flush and tight to platform.

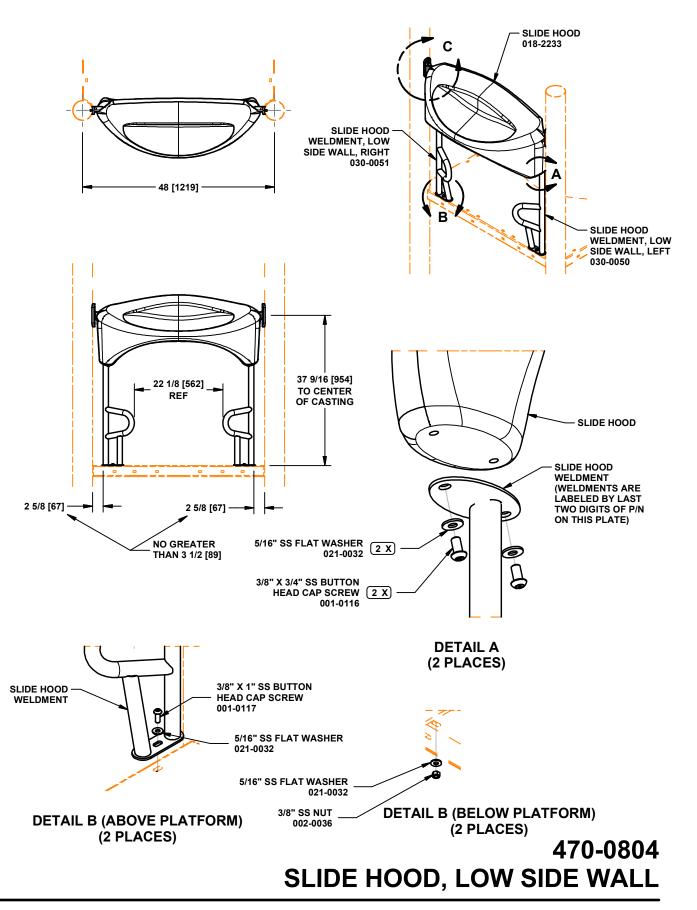
5. Tighten all hardware.

6. Block-up, level and plumb.

7. Pour concrete. Let set for two to three days.

8. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

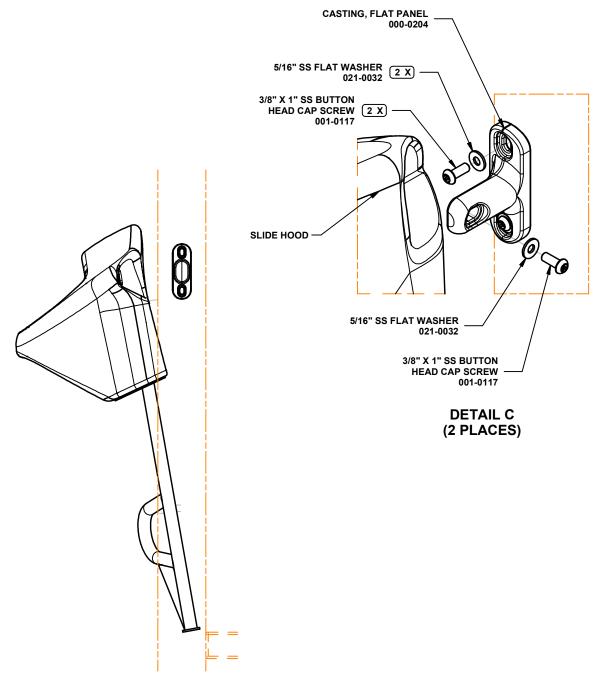




**BCI Burke Company, LLC** 

P.O. Box 549 Fond du Lac, WI 54936-0549





SIDE VIEW

## 470-0804 SLIDE HOOD, LOW SIDE WALL

	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated. Finished with bal
000-0204	CASTING, FLAT PANEL	2	on powder coating.
018-2233	SLIDE HOOD	1	<u>SLIDE HOOD</u> : Linear, low density rotationally molded, U.V. stabilized, polyethylene, .250" thick, double wall construction. Textured outside surface.
030-0050	SLIDE HOOD WELDMENT, LOW SIDE WALL, LEFT	1	SLIDE HOOD WELDMENT, LOW SIDE WALL, LEFT; SLIDE HOOD WELDME LOW SIDE WALL, RIGHT: One piece all welded construction consisting of 1.31
030-0051	SLIDE HOOD WELDMENT, LOW SIDE WALL, RIGHT	1	OD x 12 GA galvanized steel tubing and 8 GA and 10 GA galvanized steel sheeting. Finished with a baked on powder coating. HARDWARE PACKAGE; HARDWARE PACKAGE; HARDWARE PACKAGE:
036-0040	HARDWARE PACKAGE	2	Stainless steel.
036-0784	HARDWARE PACKAGE	1	
036-2006	HARDWARE PACKAGE	1	
	ardware package(s) may include extra hard necessary for this installation.	lware	SHIPPING WEIGHT: 31 LBS.

NOTE: Do not tighten hardware until instructed to do so.

1. Attach SLIDE HOOD WELDMENT, LOW SIDE WALL, LEFT and SLIDE HOOD WELDMENT, LOW SIDE WALL, RIGHT to SLIDE HOOD using hardware specified in DETAIL A. Tighten hardware.

2. Loosely fasten slide hood weldment to platform using hardware specified in DETAIL B.

3. Tilt the hood assembly out of the way and attach CASTING, FLAT PANEL using hardware in DETAIL C.

4. Tilt the hood assembly into position, against the castings, and align the slot of the casting and the nut insert of the slide hood.

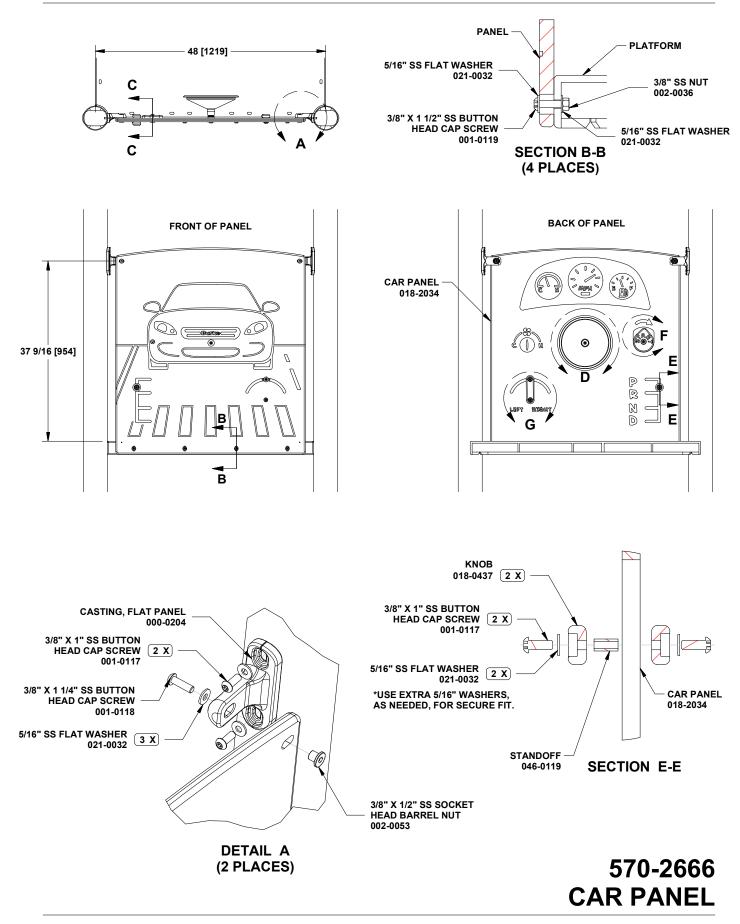
Hold the casting in position, move the hood out of the way, and then tighten hardware connecting the casting to the post.

5. Attach the slide hood assembly to the castings using the remaining hardware in DETAIL C.

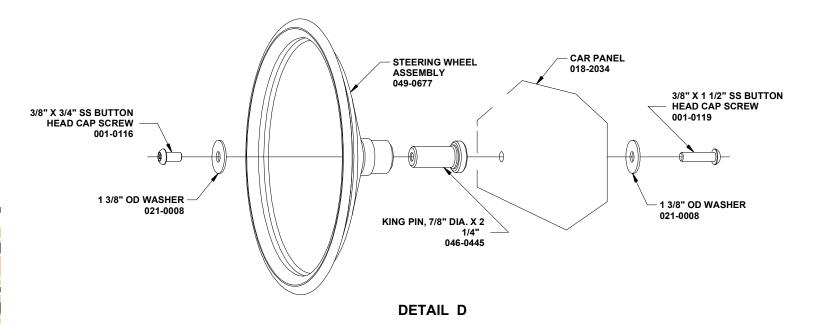
6. Tighten all hardware.

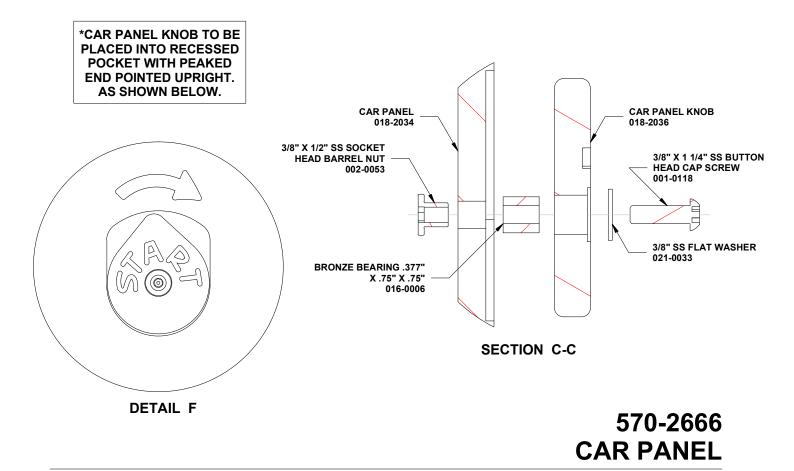


UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.

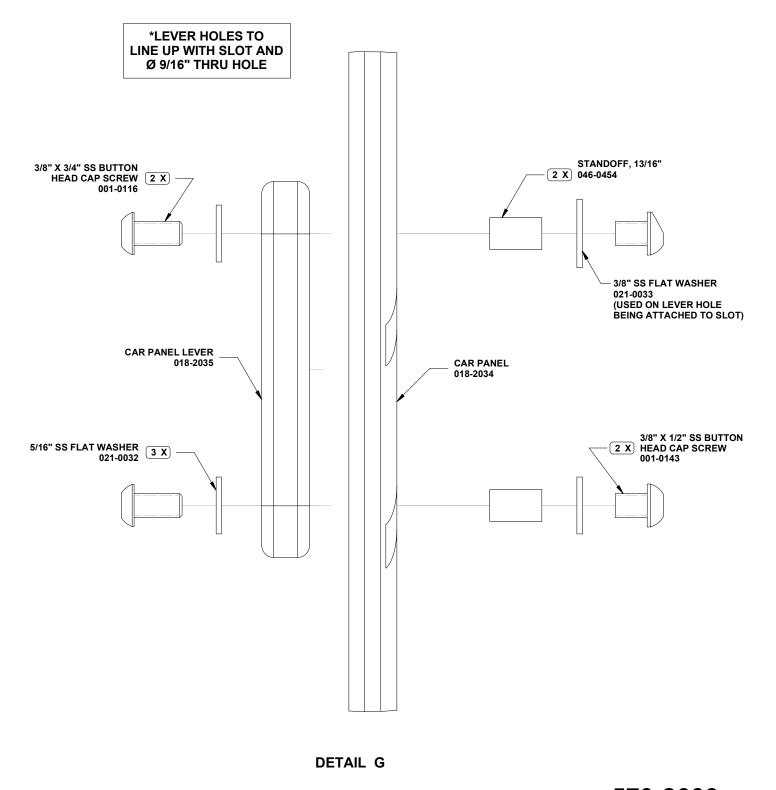












	PARTS LIST	
PART NO.	DESCRIPTION	QTY
000-0204	CASTING, FLAT PANEL	2
016-0006	BRONZE BEARING .377" X .75" X .75"	1
018-0437	KNOB	2
018-2034	CAR PANEL	1
018-2035	CAR PANEL LEVER	1
018-2036	CAR PANEL KNOB	1
036-0258	HARDWARE PACKAGE	1
036-1233	HARDWARE PACKAGE	1
036-2015	HARDWARE PACKAGE	1
036-2022	HARDWARE PACKAGE	1
036-2023	HARDWARE PACKAGE	1
046-0119	STANDOFF	1
046-0445	KING PIN, 7/8" DIA. X 2 1/4"	1
046-0454	STANDOFF, 13/16"	2
049-0677	STEERING WHEEL ASSEMBLY	1

**NOTE:** Hardware package(s) may include extra hardware that is not necessary for this installation.

#### SPECIFICATIONS

<u>CASTING, FLAT PANEL</u>: A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating.

BRONZE BEARING .377" X .75" X .75": Oil impregnated, bronze.

KNOB; CAR PANEL LEVER: 3/4" extruded HDPE.

CAR PANEL; CAR PANEL KNOB: 3/4" co-extruded HDPE.

HARDWARE PACKAGE; HARDWARE PACKAGE; HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless steel.

KING PIN, 7/8" DIA. X 2 1/4": 304 stainless steel.

STANDOFF; STANDOFF, 13/16": 1/2" OD threaded stainless steel tubing.

STEERING WHEEL ASSEMBLY: Assembly Consisting of a one piece all welded steering wheel made of 14 GA spun steel and 1 3/8" OD Steel Tube and a bronze bearing. Steering wheel is PVC coated after fabrication.

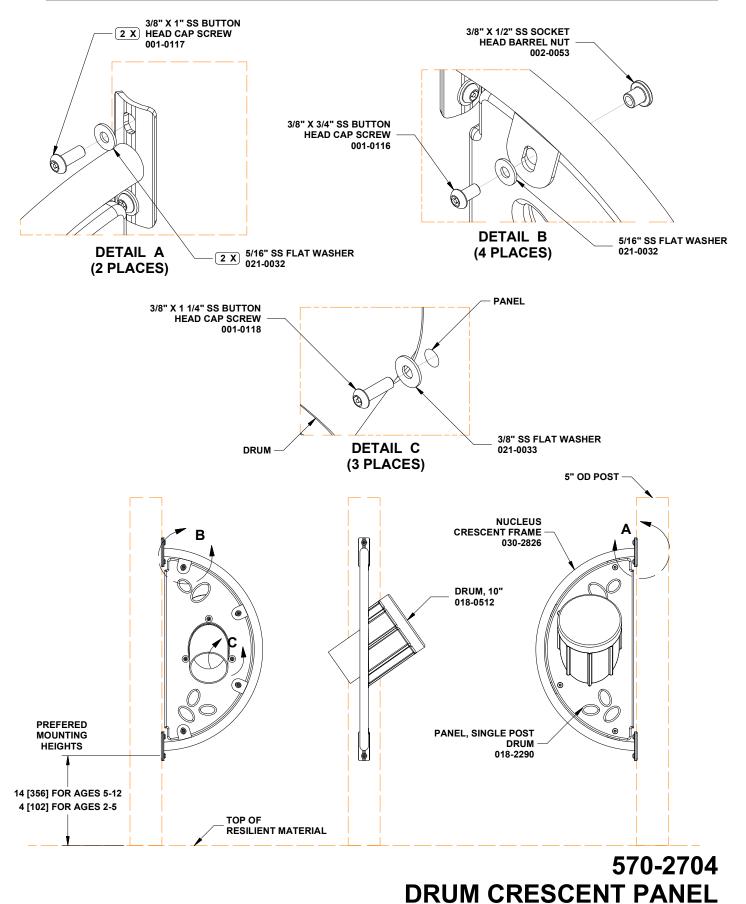
SHIPPING WEIGHT: 54 LBS.

#### INSTALLATION INSTRUCTIONS

#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of Panel assembly.
- 2. Attach FLAT PANEL CASTINGS to posts using 3/8" X 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- 3. Assemble CAR PANEL LEVER to the panel in the correct slots using STANDOFF, 13/16", 3/8" X 3/4" SS button head cap screws, 3/8" X 1/2" SS button head cap screws, 3/8" SS flat washer and 5/16" SS flat washers as shown in DETAIL G. Lever to be attached to both the appropriate slot and 9/16" diameter hole.
- 4. Assemble KNOBS to the appropriate panel slot using STANDOFF 13/16", 3/8" X 3/4" SS button head cap screws, and 5/16" SS flat washers as shown in SECTION B-B. **NOTE: Use extra 5/16" washers, as needed, for secure fit.**
- 5. Attach CAR PANEL KNOB to the panel using 3/8" X 1 1/4" SS buttonhead cap screw, 3/8" SS flat washer, BRONZE BEARING and 3/8" X 1/2" SS socket head barrel nut as shown in SECTION C-C and DETAIL F.
- 6. Attach the KING PIN to the panel using 3/8" X 1 1/2" SS button head cap screw, 1 3/8" OD washer. Tighten hardware. See DETAIL D.
- 7. Sleeve STEERING WHEEL ASSEMBLY onto king pin and attach using 1 3/8" OD washer and 3/8" X 3/4" SS button head cap screw. See DETAIL D.
- 8. Make sure wheel spins freely. If not, you may need to remove more pvc from the back of the steering wheel.
- 9. Level panel assembly and tighten all hardware.
- 10. Install resilient material accordance to installation guidelines, ASTM standards and CPSC guidlines.

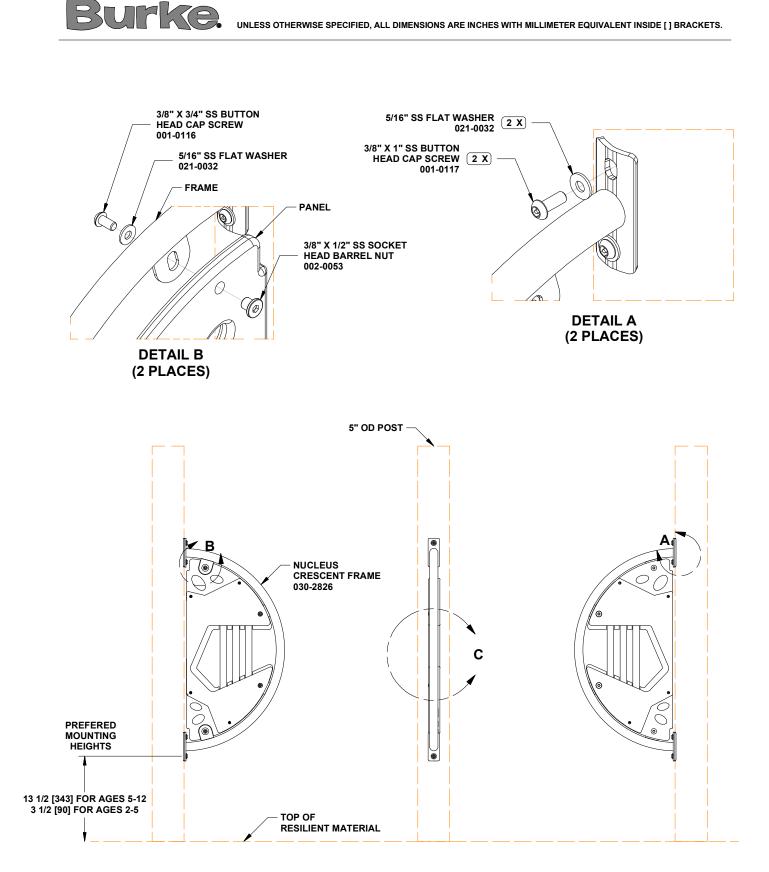




	PARTS LIST		SPECIFICATIONS	
PART NO. 018-0512 018-2290	DESCRIPTION DRUM, 10" PANEL, SINGLE POST DRUM	<u>QTY</u>	<b>DRUM, 10"</b> : An average of 3/16" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with single wall construction, molded in 3/8" T-nut inserts, and a textured outside surface.	
030-2826	NUCLEUS CRESCENT FRAME	1	PANEL, SINGLE POST DRUM: 3/4" Extruded HDPE.	
036-2053	HARDWARE PACKAGE	1	NUCLEUS CRESCENT FRAME: One piece welded construction consisting of 1.135" OD X 14 GA galvanized tubing, 10 GA galvanized tabs, and formed 7 GA stainless steel plates finished with a baked on powder coating         HARDWARE PACKAGE: Stainless steel screws, nuts and washers.	
	ardware package(s) may include extra harc necessary for this installation.	lware	SHIPPING WEIGHT: 16 LBS.	

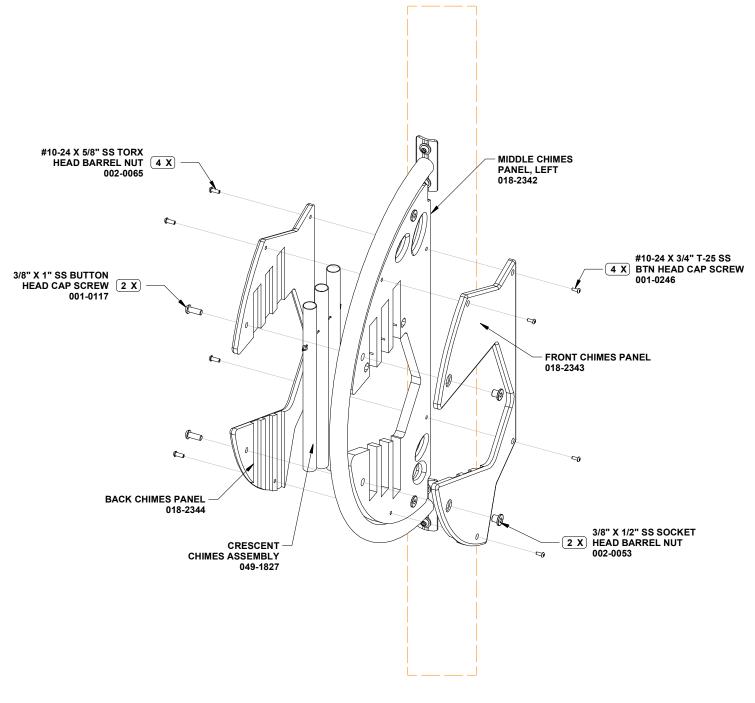
#### NOTE: Do not tighten hardware until instructed to do so.

- 1. Position PANEL FRAME against 5" OD POST and attach using hardware specified in DETAIL A.
- 2. Position PANEL, SINGLE POST DRUM against tabs on NUCLEUS CRESCENT FRAME and attach using hardware specified in DETAIL B.
- 3. Position DRUM, 10" inside PANEL, SINGLE POST DRUM and attach using hardware specified in DETAIL C.
- 4. Tighten all hardware.
- 5. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



## 570-2706 CHIMES CRESCENT PANEL, LEFT





DETAIL C

## 570-2706 CHIMES CRESCENT PANEL, LEFT

PART NO.	DESCRIPTION	QTY
018-2342	MIDDLE CHIMES PANEL, LEFT	1
018-2343	FRONT CHIMES PANEL	1
018-2344	BACK CHIMES PANEL	1
030-2826	NUCLEUS CRESCENT FRAME	1
036-0258	HARDWARE PACKAGE	2
036-1507	HARDWARE PACKAGE	1
049-1827	CRESCENT CHIMES ASSEMBLY	1

#### SPECIFICATIONS

MIDDLE CHIMES PANEL, LEFT: 3/4" Extruded HDPE.

FRONT CHIMES PANEL; BACK CHIMES PANEL: 1/2" Extruded HDPE.

**NUCLEUS CRESCENT FRAME**: One piece welded construction consisting of 1.135" OD X 14 GA galvanized tubing, 10 GA galvanized tabs, and formed 7 GA stainless steel plates finished with a baked on powder coating

HARDWARE PACKAGE: Stainless steel screws, nuts and washers.

**CHIMES ASSEMBLY, SINGLE POST:** Assembly consisting of 1.00" OD x .049" wall stainless steel tubes, 1/16" diameter stainless steel wire rope, zinc plated steel washer, and zinc plated copper compression sleeves.

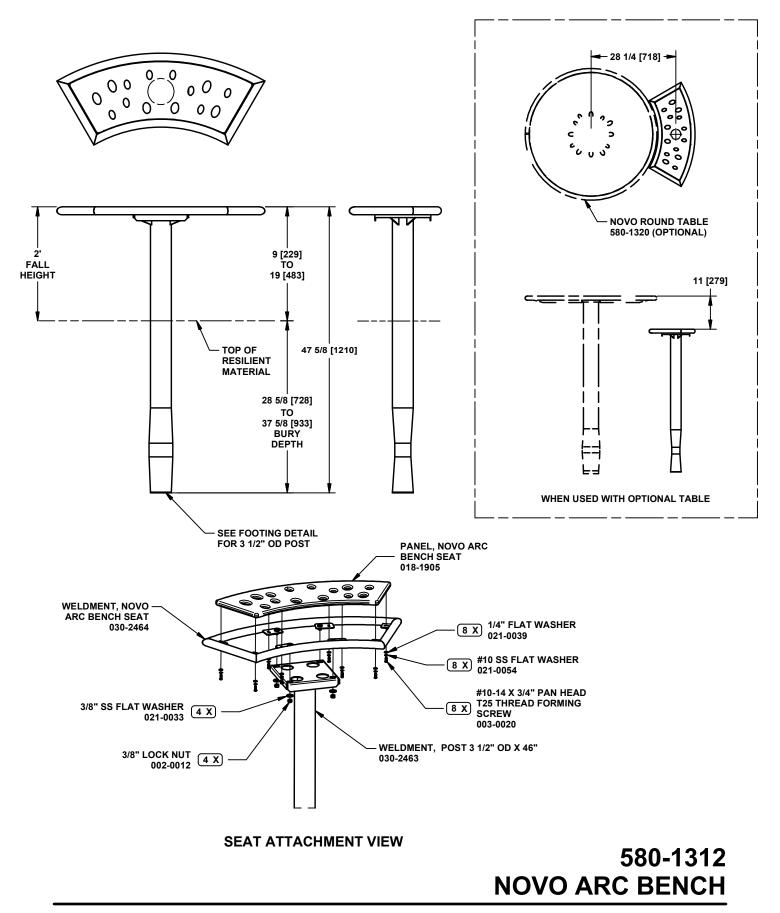
SHIPPING WEIGHT: 17 LBS.

#### INSTALLATION INSTRUCTIONS

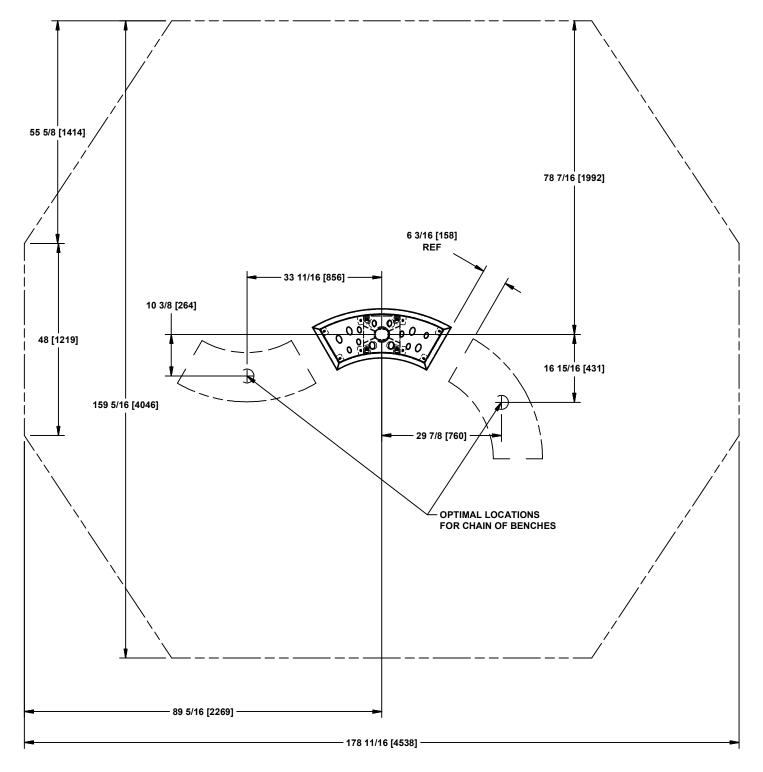
#### NOTE: Do not tighten hardware until instructed to do so.

- 1. Position NUCLEUS CRESCENT FRAME against 5" OD POST and attach using hardware specified in DETAIL A.
- 2. Position MIDDLE CHIMES PANEL against tabs on NUCLEUS CRESCENT FRAME and attach using hardware specified in DETAIL B.
- 3. Attach CHIMES ASSEMBLY, FRONT CHIMES PANEL, AND BACK CHIMES PANEL to MIDDLE CHIMES PANEL, LEFT using hardware specified in DETAIL C.
- 4. Tighten all hardware.
- 5. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.









#### FALL ZONE VIEW

## 580-1312 NOVO ARC BENCH

PART NO.         DESCRIPTION         QTY           018-1905         PANEL, NOVO ARC BENCH SEAT         1           030-2463         WELDMENT, POST 3 1/2" OD X 46 13/16"         1           030-2464         WELDMENT, NOVO ARC BENCH SEAT         1           036-0809         HARDWARE PACKAGE         1           036-2008         HARDWARE PACKAGE         2	1	PANEL, NOVO ARC BENCH SEAT: 3/4" Extruded HDPE
030-2463         WELDMENT, POST 3 1/2" OD X 46 13/16"         1           030-2464         WELDMENT, NOVO ARC BENCH SEAT         1           036-0809         HARDWARE PACKAGE         1	1	
		<ul> <li>WELDMENT, POST 3 1/2" OD X 46 13/16": One piece all welded construction consisting of 3 1/2" OD x 8 GA galvanized tubing and 12 GA galvanized sheet steel. Finished with a baked on powder coating.</li> <li>WELDMENT, NOVO ARC BENCH SEAT: One piece all welded construction consisting of 1.315" OD x 14 GA galvanized tubing and 12 GA galvanized sheet steel. Finished with a baked on powder coating.</li> <li>HARDWARE PACKAGE: Stainless Steel and Zinc-Plated Steel.</li> </ul>
<b>NOTE:</b> Hardware package(s) may include extra hardware that is not necessary for this installation.	re	SHIPPING WEIGHT: 42 LBS.

#### Note: Do not tighten hardware until assembly is complete.

1. Locate and dig footing hole as per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual.

2. Attach the WELDMENT, NOVO ARC BENCH SEAT to the PANEL, NOVO ARC BENCH SEAT using the hardware specified in SEAT ATTACHMENT VIEW.

3. Attach the WELDMENT, NOVO ARC BENCH SEAT to WELDMENT, POST 3 1/2" OD X 46 13/16" using the hardware specified in SEAT ATTACHMENT VIEW.

4. Tighten all hardware.

5. Block-up, plumb and level unit.

6. Pour concrete. Allow concrete to set for 2-3 days.

7. If installed in a play area within the use zone of play equipment, then install resilient material in accordance to installation guidelines, ASTM standards, and CPSC guidelines.



Order Number
Job Name
Structure Number

### **GENERAL CONFORMITY CERTIFICATION**

As required by the Consumer Product Safety Improvement Act of 2008, Public Law 110-314 122 Stat. 3016 (August 14, 2008) H.R. 4040

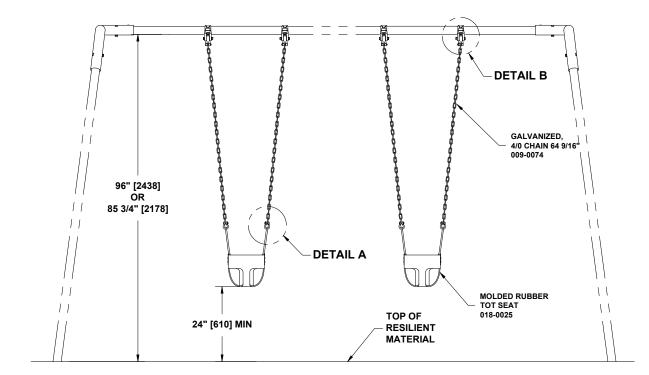
- 1. This Certification of Compliance covers the playground components sold on Order #\_\_\_\_, identified as Proposal #\_\_\_\_.
- 2. This Certification of Compliance certifies that the products identified in item 1 comply with all rules, bans, standards or regulations applicable to the product under the Consumer Product Safety Improvement Act of 2008; Sections 101, 102, 103 and 108.
- 3. Manufacturer certifying compliance of the products:

BCI Burke Company, LLC 660 Van Dyne Road Fond du Lac, WI 54935 (920) 921-9220

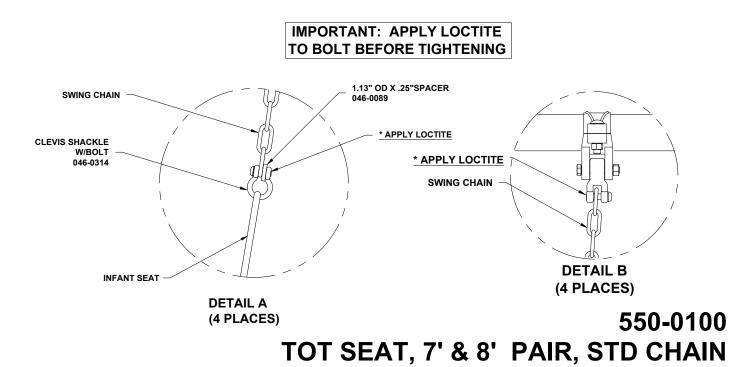
4. The contact information for the individual maintaining records of the test results is as follows: Wayne Orvold

BCI Burke Company, LLC 660 Van Dyne Road Fond du lac, WI 54935 (920) 921-9220 Worvold@bciburke.com

- 5. These products were manufactured for shipment on \_\_\_\_\_.
- 6. This General Conformity Certification and certification of compliance is based on testing completed through a reasonable testing program (ISO WI 028-08) maintained at the manufacturer listed above.
- The testing for this certificate was completed at: Applied Technical Services, Incorporated 1049 Triad Coart Marietta, GA 30062 (770) 423-1400

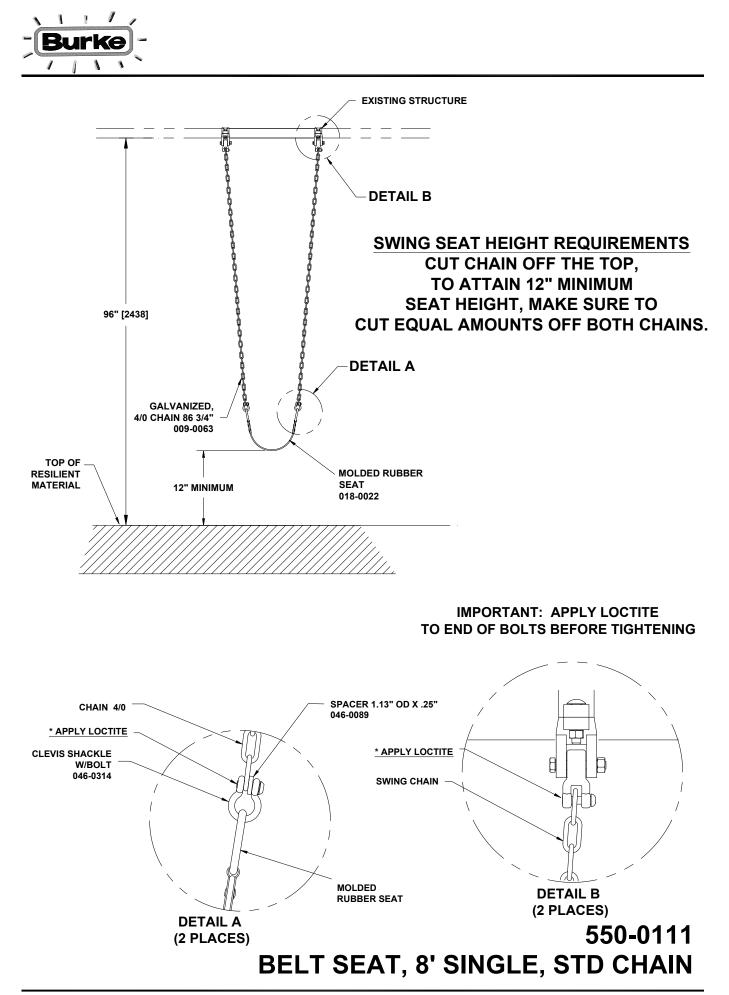


SWING SEAT HEIGHT REQUIREMENTS CUT CHAIN OFF THE TOP, TO ATTAIN 24" MINIMUM SEAT HEIGHT, MAKE SURE TO CUT EQUAL AMOUNTS OFF BOTH CHAINS.



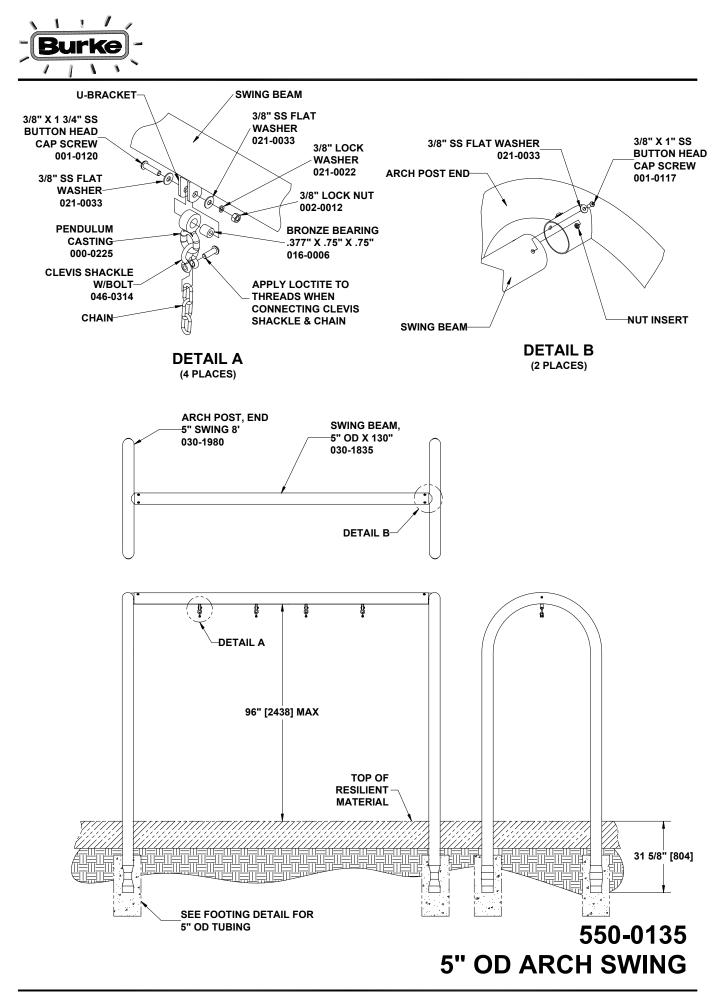
	PARTS LIST		SPECIFICATIONS
PART NO. 009-0074 018-0025 046-0089 046-2197 046-0314	PARTS LIST DESCRIPTION GALVANIZED, 4/0 CHAIN 64 9/16" MOLDED RUBBER TOT SEAT SPACER 1.13" OD X .25" LOCTITE CLEVIS SHACKLE W/BOLT	QTY 4 2 4 1 4	<ul> <li><u>GALVANIZED, 4/0 CHAIN 64 9/16"</u>: 3/8" diameter, 4/0 straight coil chain.</li> <li><u>MOLDED RUBBER TOT SEAT</u>: Molded rubber, reinforced with a steel insert. Riveted galvanized attachment hardware.</li> <li><u>SPACER 1.13" OD X .25"</u>: 1/4" Nylatron GS.</li> <li><u>LOCTITE</u>: Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and</li> </ul>
Note: Hardw	vare package(s) may include extra hardv	vare	cumene hydroperoxide. <u>CLEVIS SHACKLE W/BOLT</u> : 5/16" Shackle with a 3/8" X 1 1/2" bolt.
	ecessary for this installation.	Varo	SHIPPING WEIGHT: 24 LBS.

- Unscrew bolt on swing hanger and attach swing CHAIN 4/0 to swing hanger. Apply LOCTITE to all bolts on hangers before tightening. See DETAIL B.
- 2. Unscrew bolt in CLEVIS SHACKLE and slide shackles onto both sides of MOLDED RUBBER SEAT. See DETAIL A.
- 3. Determine what length to cut the chains. Attach the seat to the chains with SPACER and shackle at your desired height. Note there must be a minimum of 24" between the underside of the seat and the top of the resilient material.
- 4. With the seats at the desired heights and also attaining the 24" minimum clearance, cut and remove the excess chain. Make sure to cut the same length off each chain so that the seat remains level. Apply loctite to all shackle bolts and tighten.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

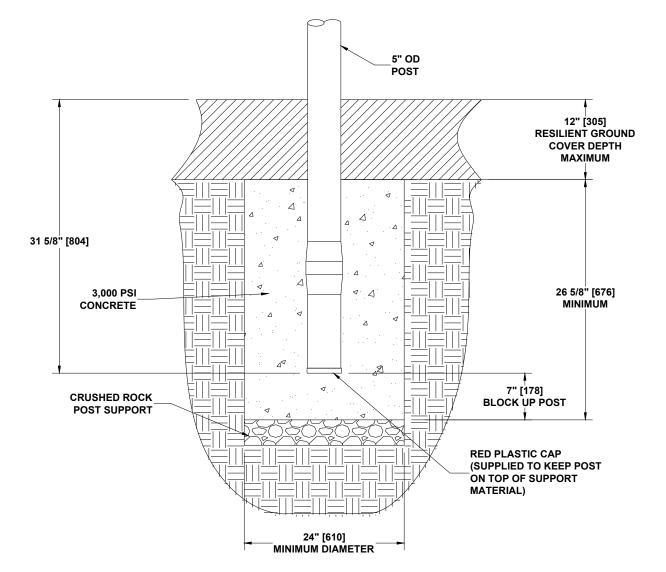


	PARTS LIST		SPECIFICATIONS
PART NO. 009-0063 018-0022 046-0089 046-2197 046-0314	PARTS LIST DESCRIPTION GALVANIZED 4/0 CHAIN 86 3/4" MOLDED RUBBER SEAT SPACER 1.13" OD X .25" LOCTITE CLEVIS SHACKLE W/BOLT	QTY 2 1 2 1 2	SPECIFICATIONS         GALVANIZED 4/0 CHAIN 86 3/4": 3/8" diameter, 4/0 straight coil chain.         MOLDED RUBBER SEAT: Molded rubber, reinforced with a steel insert. Riveted galvanized attachment hardware.         SPACER 1.13" OD X .25": 1/4" Nylatron GS.         LOCTITE: Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and cumene hydroperoxide.         CLEVIS SHACKLE W/BOLT: 5/16" Shackle with a 3/8" X 1 1/2" bolt.
	vare package(s) may include extra hard ecessary for this installation.	ware	SHIPPING WEIGHT: 11 LBS.

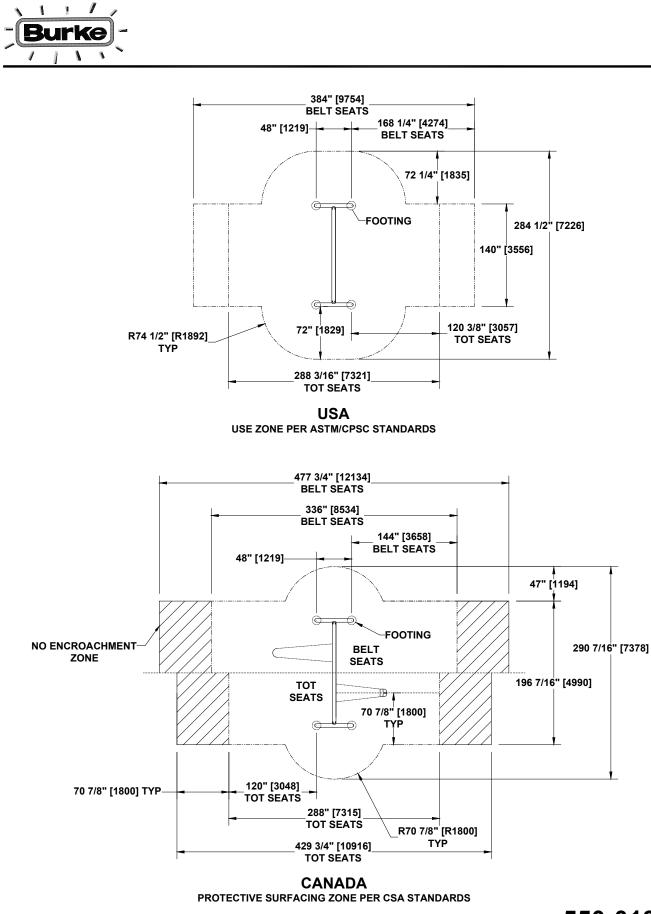
- 1. Unscrew bolt on swing hanger and attach swing CHAIN 4/0 to swing hanger. Apply LOCTITE to all bolts on hangers before tightening. See DETAIL B.
- 2. Unscrew bolt in CLEVIS SHACKLE and slide shackles onto both sides of MOLDED RUBBER SEAT. See DETAIL A.
- 3. Determine what length to cut the chains. Attach the seat to the chains with SPACER and shackle at your desired height. Note there must be a minimum of 12" below the seat between the underside of the seat and the top of the resilient material. When measuring, the seat must be pulled down as if someone were sitting in it and the resilient material must be at it's finished depth.
- 4. With the seats at the desired heights and also attaining the 12" minimum clearance, cut and remove the excess chain. Make sure to cut the same length off each chain so that the seat remains level. Apply Loctite to all shackle bolts and tighten.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.







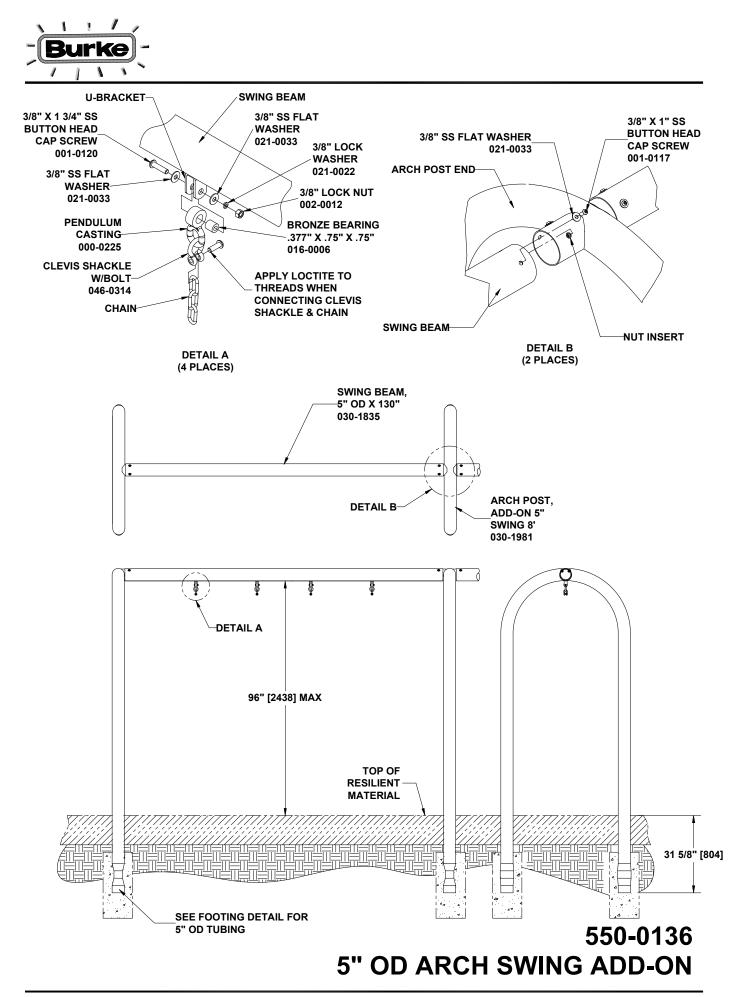
550-0135 5" OD ARCH SWING



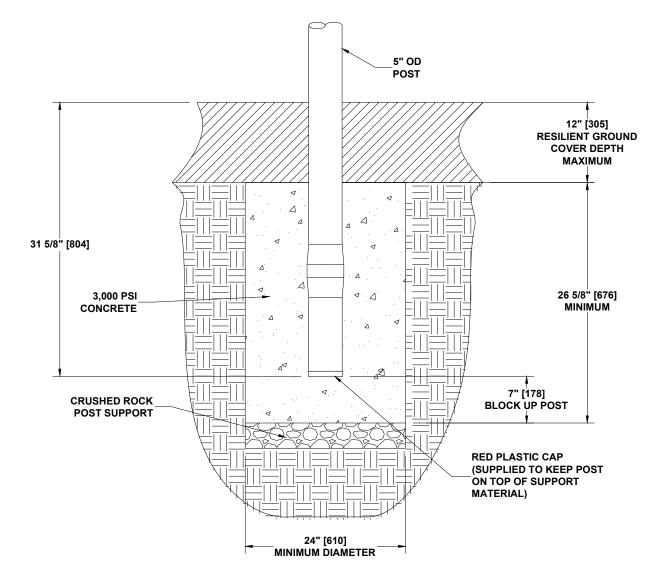
550-0135 5" OD ARCH SWING

	PARTS LIST		SPECIFICATIONS
PART NO. 000-0225 016-0006 030-1835 030-1980	DESCRIPTION PENDULUM CASTING BRONZE BEARING .377" X .75" X .75" SWING BEAM, 5" OD X 130" ARCH POST END, 5" OD SWING	QTY 4 4 1 2	PENDULUM CASTING: Galvanize plated, grade 32510, malleable iron         BRONZE BEARING .377" X .75" X .75": Oil impregnated, bronze.         SWING BEAM, 5" OD X 130": One piece all welded construction consisting of 5" OD x 11 GA galvanized steel tubing and 8 GA
036-0227 036-0788 036-1414 046-2197	HARDWARE PACKAGE HARDWARE PACKAGE HARDWARE PACKAGE LOCTITE	1 2 1 1	<ul> <li><u>ARCH POST END, 5" OD SWING</u>: One piece all welded construction consisting of 5" OD x 11 GA &amp; 11/16" OD low carbon steel bar and 4 1/2" OD x 11 GA steel tubing w/cadmium and yellow chromate plating, and an assembly of 3/8" nut inserts. Finished with a baked on powder coating.</li> <li><u>HARDWARE PACKAGE</u>: Stainless steel.</li> </ul>
			HARDWARE PACKAGE: 5/16" Shackle with a 3/8" X 1 5/32" bolt. HARDWARE PACKAGE: Stainless steel washers & screws and
			zinc plated steel lock nuts & washers. <u>LOCTITE</u> : Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and cumene hydroperoxide.
	vare package(s) may include extra hard ecessary for this installation.	ware	SHIPPING WEIGHT: 367 LBS.

- 1. Determine 5" OD post locations per dimensions shown.
- 2. Dig footing holes. See typical concrete footing drawing for 5" OD posts, which is located in the preface of the installation manual.
- 3. Attach 5" OD x 130" SWING BEAM to both ARCH POST, END 5" OD SWING by sleeving the swing beam over arch post stub and fasten using 3/8" X 1" SS button head cap screws. Tighten hardware. See DETAIL B.
- 4. Position frame into footing holes. Block up, plumb, and level frame.
- 5. Pour concrete and allow it to set for 2 to 3 days.
- 6. Insert BRONZE BEARING .377" X .75" X .75" into PENDULUMS and attach to swing beam as shown in DETAIL A. Tighten hardware.
- 7. Attach swing chain to pendulum using CLEVIS SHACKLE W/ BOLT. Tighten hardware. See DETAIL A.
- 8. INSTALL RESILIENT SURFACING MATERIAL.

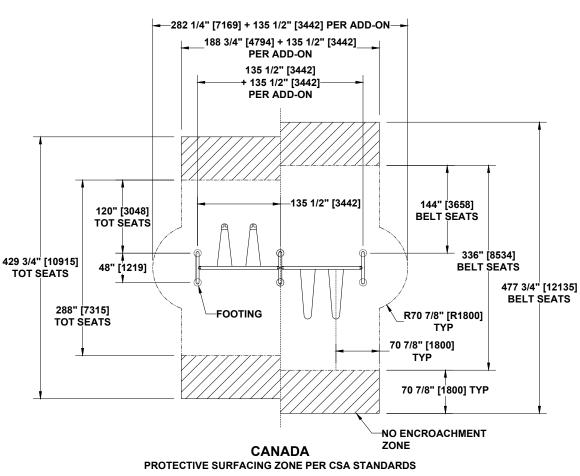




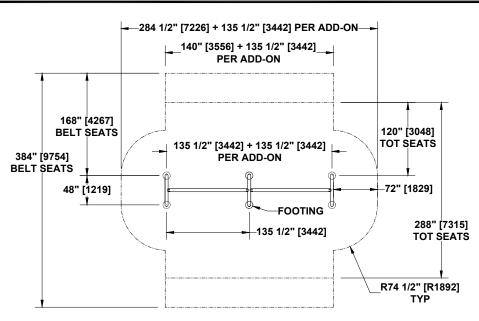


550-0136 5" OD ARCH SWING ADD-ON

## 550-0136 5" OD ARCH SWING ADD-ON







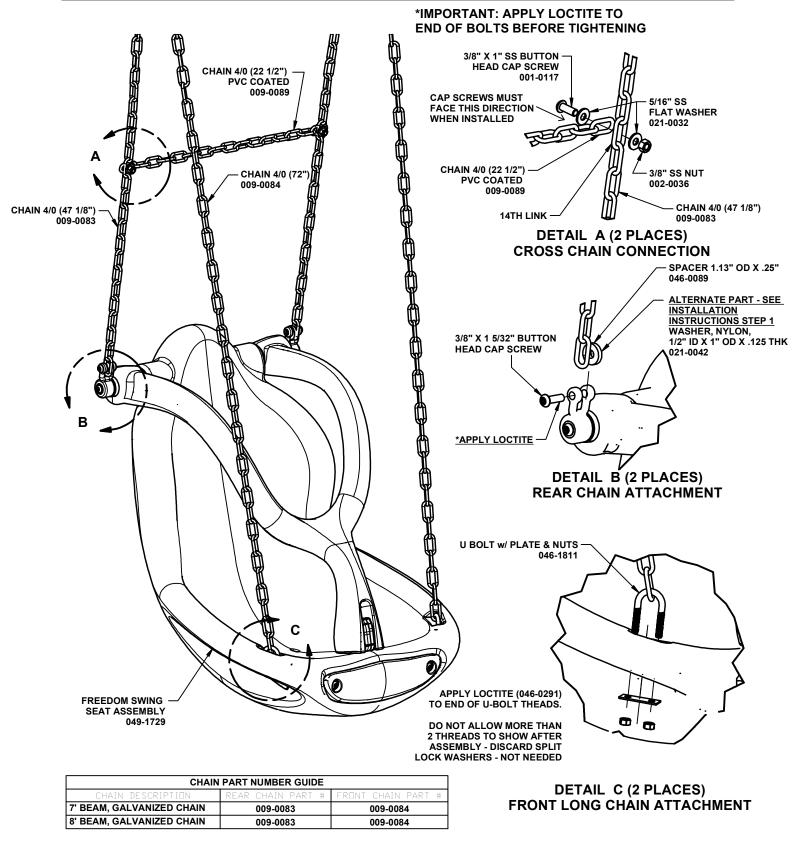


DADTNO			SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	PENDULUM CASTING: Galvanize plated, grade 32510,
000-0225		4	malleable iron
016-0006	BRONZE BEARING .377" X .75" X .75"	4	BRONZE BEARING .377" X .75" X .75": Oil impregnated, bronze.
030-1835	SWING BEAM, 5" OD X 130"	1	SWING REAM 5" OD X 120" One piece all wolded construction
030-1981	ARCH POST, ADD-ON 5" OD SWING	1	<u>SWING BEAM, 5" OD X 130"</u> : One piece all welded construction consisting of 5" OD x 11 GA galvanized steel tubing and 8 GA
036-0227 036-0788	HARDWARE PACKAGE HARDWARE PACKAGE	1 2	galvanized steel plate. Finished with a baked on powder coating.
036-1414	HARDWARE PACKAGE	1	ARCH POST, ADD-ON 5" OD SWING: One piece all welded
046-2197	LOCTITE	1	construction consisting of 5" OD x 11 GA & 3/8" Schedule 40
			galvanized steel pipe and 4 1/2" OD x 11 GA steel tubing
			w/cadmium and yellow chromate plating, and an assembly of 3/8" nut inserts. Finished with a baked on powder coating.
			nut inserts. I misned with a baked on powder coating.
			HARDWARE PACKAGE: Stainless steel.
			HARDWARE PACKAGE: 5/16" Shackle with a 3/8" X 1 5/32"
			bolt.
			HADDWARE DACKACE: Steinlass steel weekers & service and
			HARDWARE PACKAGE: Stainless steel washers & screws and zinc plated steel lock nuts & washers.
			<u>LOCTITE</u> : Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate,
			polyglycol oleate propylene clycol, titanium dioxide, and cumene
			hydroperoxide.
	vare package(s) may include extra hardwa	are	
that is not ne	ecessary for this installation.		SHIPPING WEIGHT: 224 LBS.

- 1. Determine 5" OD post locations per dimensions shown.
- 2. Dig footing holes. See typical concrete footing drawing for 5" OD posts, which is located in the preface of the installation manual.
- 3. Attach 5" OD x 130" SWING BEAM to arch post end and ARCH POST, ADD-ON 5" SWING 8' by sleeving the swing beam over arch post and fasten using 3/8" X 1" SS button head cap screws. Tighten the hardware. See DETAIL B.
- 4. Position frame into footing holes. Block up, plumb, and level frame.
- 5. Pour concrete and allow it to set for 2 to 3 days.
- 6. Insert BRONZE BEARING .377" X .75" X .75" into PENDULUMS and attach to swing beam as shown in DETAIL A. Tighten hardware.
- 7. Attach swing chain to pendulum using CLEVIS SHACKLE W/ BOLT. Tighten hardware. See DETAIL A.
- 8. INSTALL RESILIENT SURFACING MATERIAL.



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.

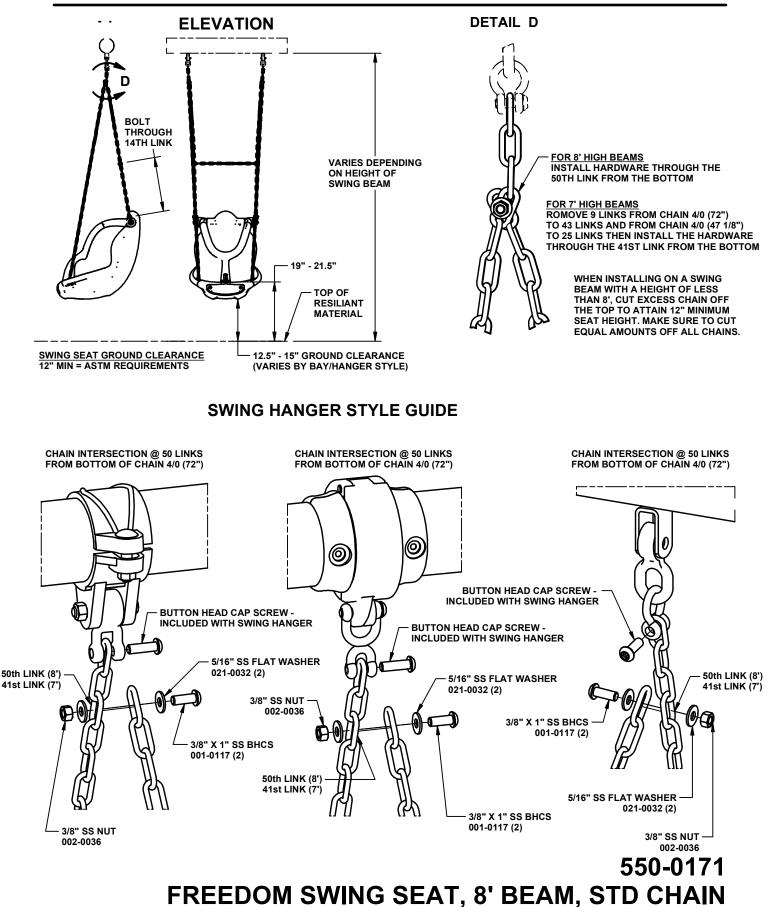


## 550-0171 FREEDOM SWING SEAT, 8' BEAM, STD CHAIN

P.O. Box 549 Fond du Lac, WI 54936-0549



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.



P.O. Box 549 Fond du Lac, WI 54936-0549

	PARTS LIST			SPECIFICATIONS
PART NO.	DESCRIPTION	QTY		CHAIN 4/0 (47 1/8"): 3/8" diameter, 4/0 straight coil chain.
009-0083	CHAIN 4/0 (47 1/8")	2		CHAIN 4/0 (72"): 3/8" diameter, 4/0 straight coil chain.
009-0084	CHAIN 4/0 (72")	2		
009-0089	CHAIN 4/0 (22 1/2") PVC COATED	1		CHAIN 4/0 (22 1/2"): 3/8" diameter, 4/0 straight coil chain. PVC
036-0870	HARWARE PACK	1		coated after fabrication.
046-0089	SPACER 1.13" OD X .25"	2		_
046-2197	LOCTITE	1		HARDWARE PACK: Stainless steel screws, washers & nuts,
046-1811	U BOLT w/ PLATE & NUTS, 5/16"-18	2		nylon washers and zinc plated steel lock washer.
049-1729	FREEDOM SWING SEAT ASSEMBLY	1		
				<u>LOCTITE:</u> Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and cumene hydroperoxide. <u>U BOLT w/ PLATE &amp; NUTS, 5/16"-18</u> : Stainless steel hardware <u>FREEDOM SWING SEAT ASSEMBLY</u> : Seat with harness made of 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction, molded in 3/8" T-nut inserts and a textured surface assembled together using an aluminium rod, stainless steel hardware, shims,
	ardware package(s) may include extra hard necessary for this installation.	lware		springs, pins & standoffs along with a rubber bumper. SHIPPING WEIGHT: 38 LBS.

1. Unscrew cap screw from the rear attachment hanger on the swing. Connect CHAIN 4/0 (47 1/8") to the FREEDOM SWING SEAT using the hardware shown in DETAIL B. Ensure the SPACER is installed inboard of the chains when making this attachment. Apply loctite to all shackle bolts and tighten. NOTE: IF SPACER 1.13" OD X .25" DOESN'T FIT IN OPENING WITH CHAIN USE WASHER, NYLON, 1/2" ID X 1" OD X .125 THK IN ITS PLACE.

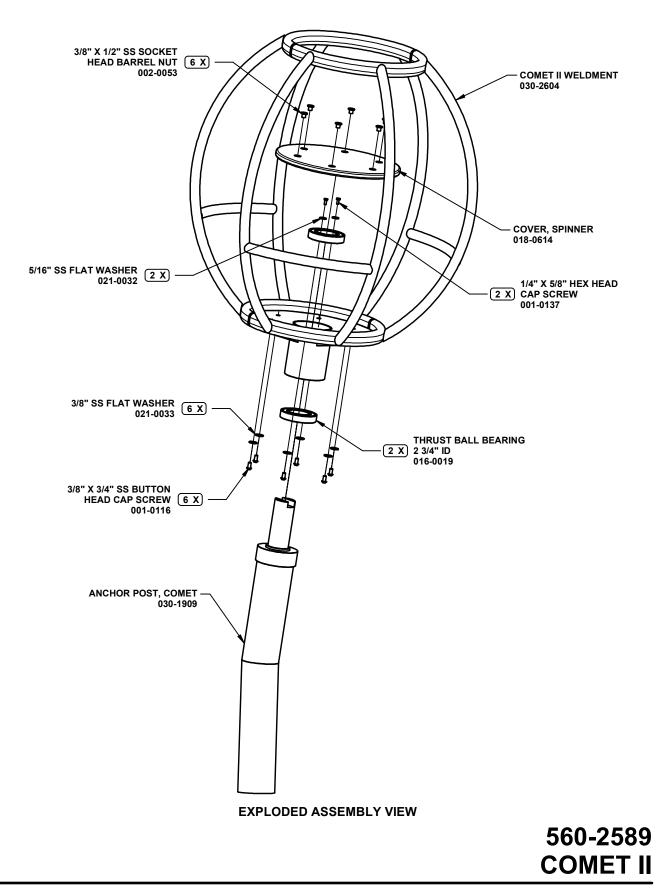
2. Attach the CHAIN 4/0 (72") to the FREEDOM SWING SEAT using the hardware shown in DETAIL C. Attach CHAIN 4/0 (72") to U-bolt and gently tap the U-BOLT through the FREEDOM SWING SEAT only until you are able to install the U-BOLT PLATE and NUTS (discard lock washers - not needed). Loctite must be applied to the U-bolt threads prior to installing the NUTS. Tighten the nuts on the underside of the U-BOLT PLATE until no more than 2 threads are visible on the U-bolt.

3. Attach CHAIN 4/0 (72") to swing hangers as shown in SWING HANGER STYLE GUIDE.

4. Attach CHAIN 4/0 (47 1/8") to the 50th link in CHAIN 4/0 (72") using the hardware shown in the SWING HANGER STYLE GUIDE. If installing on a beam lower than 8' refer to DETAIL D for special chain trimming instructions.

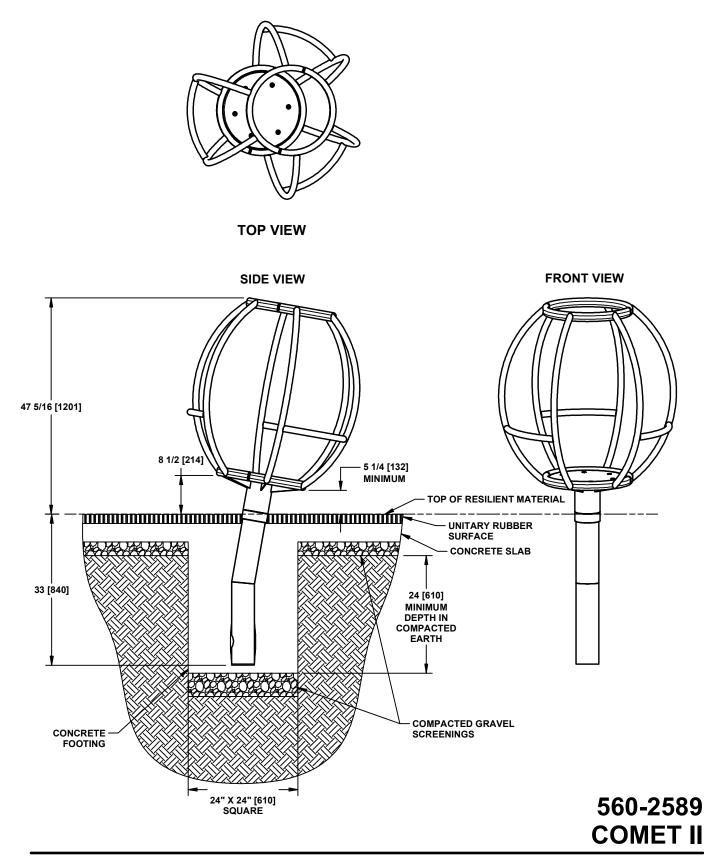
Attach CHAIN 4/0 (22 1/2") to CHAIN 4/0 (47 1/8") using the hardware shown in DETAIL A. CHAIN 4/0 22 1/2") must be installed through the 14th link from the bottom of CHAIN 4/0 (47 1/8"). Threads must also face inward/downward as shown in DETAIL A.
 Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



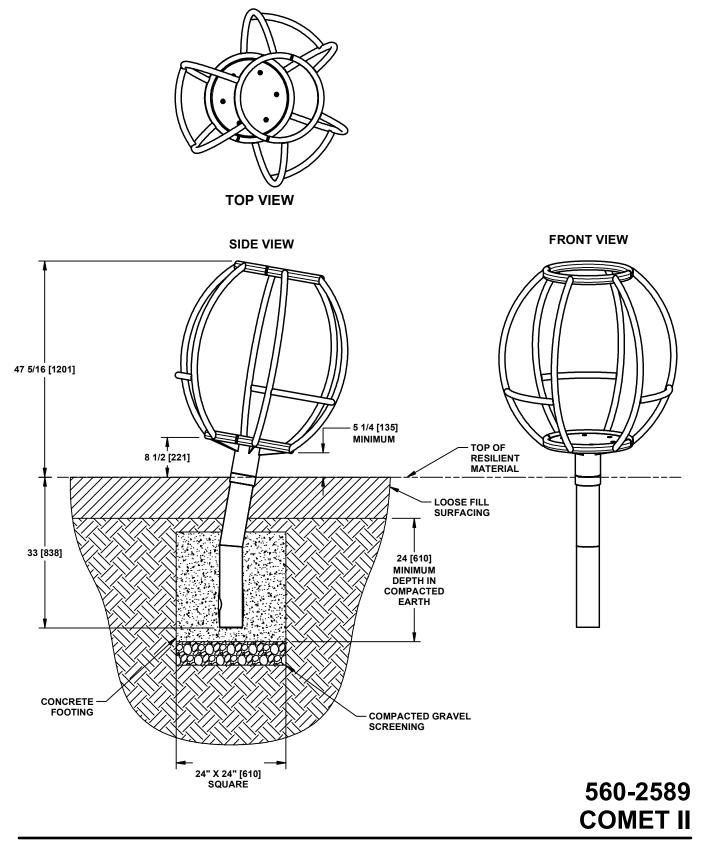


**BCI Burke Company, LLC** 

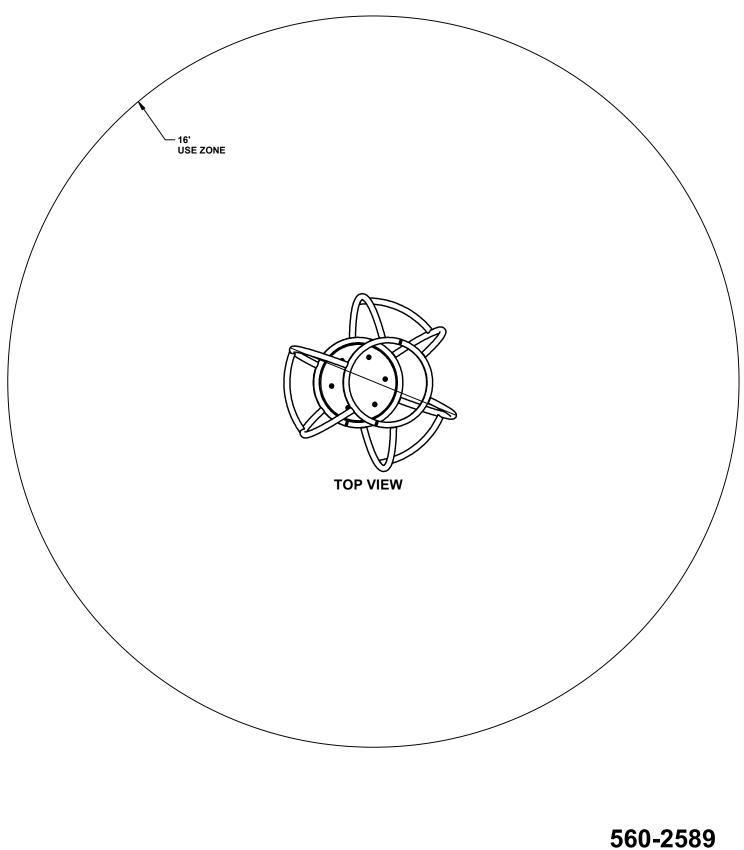
#### \*THIS PAGE SHOULD BE USED WHEN UNITARY RUBBER SURFACING IS BEING USED FOR RESILIENT MATERIAL.



#### \*THIS PAGE SHOULD BE USED WHEN LOOSE FILL MATERIAL IS BEING USED FOR RESILIENT MATERIAL.









	PARTS LIST		1 [	SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>		THRUST BALL BEARING 2 3/4" ID: Heavy duty, precision thrust
016-0019	THRUST BALL BEARING 2 3/4" ID	2		sealed ball bearing.
018-0614	COVER, SPINNER	1		COVER, SPINNER: 3/4" extruded HDPE.
030-1909	ANCHOR POST, COMET	1		
030-2604	COMET II WELDMENT	1		ANCHOR POST, COMET: One piece all welded construction
036-0877	HARDWARE PACKAGE	1		consisting of 5 1/2" dia. steel housing with 2 3/4" dia. shaft, 1/4" & 7 GA HR steel plate and gussets. Finished with a baked on
036-1015	HARDWARE PACKAGE	1		powder coating.
<u>NOTE:</u> На	HARDWARE PACKAGE ardware package(s) may include extra hard necessary for this installation.	dware		COMET II WELDMENT: One piece all welded construction consisting of formed 2 3/8" OD x 10 GA galvanized steel tubing and 8 GA galvanized steel plate. Finished with a baked on powder coating. <u>HARDWARE PACKAGE; HARDWARE PACKAGE</u> : Stainless steel button head cap screws, washers and barrel nuts. <u>HARDWARE PACKAGE</u> : Zinc plated steel. SHIPPING WEIGHT: 146.7 LBS.
	INSTAL	LATION	1 11	NSTRUCTIONS

NOTE: Do not tighten hardware until instructed to do so.

1. Determine correct footing location for COMET II to be installed.

2. Dig footing hole per dimensions shown in SIDE VIEW. **NOTE:** Hole size and depth may vary depending on local soil, weather conditions and type of resilient material. There is a minimum 24" depth of footing in compacted earth, so the overall height of the footing will be greater than 24" and will be based on the type of surfacing and sub-surfacing used.

3. Apply a liberal amount of grease to the spinning Comet weldment housing and the Comet anchor post shaft.

4. Tap one THRUST BEARING onto COMET ANCHOR POST SHAFT and the other into the COMET II WELDMENT hub housing using a block of wood and a hammer. Then slide COMET II WELDMENT hub and bearing onto shaft of the COMET ANCHOR POST and secure with (2) 1/4" x 5/8" HEX HEAD CAP SCREW and 5/16" SS FLAT WASHER. Make sure both bearings are completely seated. See EXPLODED ASSEMBLY VIEW.

5. Attach SPINNER COVER to bottom plate of COMET II WELDMENT using hardware specified in EXPLODED ASSEMBLY VIEW.

- 6. Block-up and level. Tighten all hardware.
- 7. Pour concrete and allow to set for 2-3 days.

8. Install resilient material in accordance to installation guidlines, ASTM standards and CPSC guidlines.



Order Number
Job Name
Structure Number

### **GENERAL CONFORMITY CERTIFICATION**

As required by the Consumer Product Safety Improvement Act of 2008, Public Law 110-314 122 Stat. 3016 (August 14, 2008) H.R. 4040

- 1. This Certification of Compliance covers the playground components sold on Order #\_\_\_\_, identified as Proposal #\_\_\_\_.
- 2. This Certification of Compliance certifies that the products identified in item 1 comply with all rules, bans, standards or regulations applicable to the product under the Consumer Product Safety Improvement Act of 2008; Sections 101, 102, 103 and 108.
- 3. Manufacturer certifying compliance of the products:

BCI Burke Company, LLC 660 Van Dyne Road Fond du Lac, WI 54935 (920) 921-9220

4. The contact information for the individual maintaining records of the test results is as follows: Wayne Orvold

BCI Burke Company, LLC 660 Van Dyne Road Fond du lac, WI 54935 (920) 921-9220 Worvold@bciburke.com

- 5. These products were manufactured for shipment on \_\_\_\_\_.
- 6. This General Conformity Certification and certification of compliance is based on testing completed through a reasonable testing program (ISO WI 028-08) maintained at the manufacturer listed above.
- The testing for this certificate was completed at: Applied Technical Services, Incorporated 1049 Triad Coart Marietta, GA 30062 (770) 423-1400

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# SITE PLAN & FOOTING PLAN DRAWINGS ARE LOCATED IN THE BACK OF THE MANUAL ALONG WITH ORDER DOCUMENTATION.

## **INTRODUCTION**

#### Congratulations on your purchase of Burke playground equipment!

A tremendous amount of care, quality and workmanship went into the design and manufacture of your equipment. Now is the time when your part of the teamwork really begins.

Following are a few topics vital to the maintenance of your playground and - most importantly - minimizing your problems in the field.

- All equipment <u>must</u> be installed per Burke Installation Guidelines and Specifications. Detailed prints and instructions are included in the back of this manual, arranged in numerical order by the component number which can be found on the site plan drawings which are at the very end of this manual.
- Don't forget to add a proper safety surface, as recommended by CPSC Guidelines for Public Playground Equipment and ASTM- F 1487 Standards or CSA/CAN Z614 Standards.
- It is critical to the long life of your equipment to establish a routine maintenance program. To help you, enclosed is a checklist including frequency for inspection based on recommendations of the CPSC Guidelines for Public Playground Equipment.

If your playground has been installed in atmospheric conditions of high salt content, i.e. near the ocean, the chance for corrosion is much more likely. Therefore, frequent checks are highly recommended.

Your equipment has arrived in great shape. **Protect your Warranty - equipment maintenance is up to you.** 

We are here to help you with any questions or concerns you may have about your equipment. Please feel free to call our Toll Free 1-800 number.

#### Thank you for your business.

#### **BCI Burke Company, LLC**

For questions, call us at: **1-800-356-2070** 

This installation manual is applicable to the following playground equipment: Nucleus®, Voltage®, Intensity®, NaturePlay®, Circuit Play®, Circuit Play Beginnings®, Little Buddies® and Burke Basics

## **SUPERVISION**

Playgrounds should be supervised at all times when children are using them. Supervisors and parents should use sound judgment in preventing overcrowding on equipment, or the use of play apparatus whose challenge exceeds the user's capabilities. Parents and adult supervisors should instruct children on the safe use of playground equipment. Intensive classroom and home instruction about safe behavior on playground equipment make an important contribution to playground safety.

For references and details on safety recommendations, we suggest you add the following publications to your library.

- Consumer Product Safety Commission (CPSC) <u>A Handbook for Public Playground</u> <u>Safety</u> (Publication No. 325)
   Standard consumer safety performance specification for playground equipment for public use.
- American Society for Testing and Materials (ASTM) F1487 -Standard consumer safety performance specification for playground equipment for public use.
- American Society for Testing and Materials (ASTM) F1292 -Standard specification for impact attenuation of surface systems under and around playground equipment.
- Canadian Standards Association (CAN/CSA) Z614 -<u>Children's Playspaces and Equipment</u> A National Standard of Canada

To obtain the above publications you may contact the following:

US Consumer Product Safety Commission Washington, D.C. 20207 1-800-638-2772 http://www.cpsc.gov Canadian Standards Association 5060 Spectrum Way, Suite 100 Mississauga, Ontario, Canada L4W 5N6 <u>http://www.csa.ca</u> (800) 463-6727

American Society for Testing and Materials 100 Barr Harbor Dr. West Conshohocken, PA 19428 http://www.astm.org (610) 832-9585 Fax: (610) 832-9555

#### NOTE:

For equipment and components that are certified and compliant with the Canadian Standard, CAN/CSA Z614, BCI Burke Company, LLC has performed the necessary Structural Integrity tests required and can ensure compliance with the requirements of Clause 9.

BCI Burke Company, LLC

## **PRE-INSTALLATION GUIDELINES**

Instructions are clearly presented and simple to read. Each step in the process is concisely explained. There are no secrets to completing a successful BCI Burke play structure package. Carefully read the instructions and familiarize yourself with the assembly procedures. Continually keep in mind that proper planning saves time and money. When your unit is finally assembled, place your instruction sheets in a safe, but easily accessible, file for future referral. Do not deviate or take shortcuts in the assembly procedures.

BCI Burke builds durable, long-lasting equipment. You, however, are responsible for the proper installation and maintenance of the equipment. Always follow the equipment installation drawings provided and DO NOT deviate from the specifications or fabrication.

Several steps are of the UTMOST IMPORTANCE before beginning assembly:

- 1. Read instructions carefully and familiarize yourself with the site plan drawings in the very back of this manual, and the accompanying component installation instructions, arranged in numerical order also in the back of this manual.
- 2. Make sure to plan to orientate and place structures so that slides are not in direct sunlight during play times, as slide surfaces tend to get hot.
- 3. Clear and level an area large enough for your unit and the recommended minimum use and noencroachment zones. A use zone is an area beneath and around the equipment, which we have identified on the plan drawing, which can be found in the back of this manual. This zone under and around your equipment must be free and clear of any obstruction. Overhead obstructions within the use zones of playground equipment that are not part of the play structure (for example tree limbs) shall be at least 84" above each designated play surface or 84" above the pivot point of the swings. All overhead utility line clearances above the use zone areas shall comply with all local, state, and national codes (ex: National Electrical Safety Code).
- 4. Have the proper tools available for installation. You will need an auger for digging footing holes, hammer, rubber mallet, 3/16", 1/4", 5/16", 7/16" and 3/4" drill bits, an accurate level, tape measure along with a standard set of wrenches, and a non-permanent felt-tip pen for marking clamp locations. A tool for completely closing S-Hooks is also necessary.
- 5. The equipment will arrive via truck and will be packed on long pallets, up to 14' long. You will need to plan for a way to remove the pallets from the truck, either with a fork lift with extended forks, or a large group of people to unload from the pallet on the truck by hand.
- 6. The use of a transit is recommended for accurate footing and platform heights. Plot the dimensions of your layout accurately with all 5" OD (Nucleus, Intensity) support posts at 48" centers, all 3-1/2" OD (Voltage) platform support posts at 44" centers and all 2-3/8" OD (Little Buddies) platform support posts at 40" centers. Footing hole locations for other components can be done at a later time during installation.

## **GENERAL INSTALLATION GUIDELINES**

- 1. Identify each component of your equipment before starting installation. The Site Plan drawings in the very back of this manual identify each component by number and also identify each of the upright support posts with a letter and number designation.
- 2. The letter and number designation for the upright posts can also be found on the packaging of each post. See Figure 1 for reference below.



## Figure 1

- 3. The Installation Instructions are located in the back of this manual, arranged in numerical order by the component number. The component number can be found on the site plan and on the list of components in the order documentation.
- 4. The platform heights, which are shown as a number in a circle on the platform on the Site Plan Drawings, are measured from the finished grade of the resilient surfacing material to the top of the platforms. They are shown in inches.
- 5. Footing hole depths may vary depending on the depth of the resilient material to be installed along with local soil and weather conditions. See Typical Concrete Footings in Figures 2 7 (located on pages 11 13). Use masonry bricks, gravel, or shims at the bottom of the footing holes in order to block up and plumb the posts and the platforms to the correct level. Be sure to use red plastic caps provided on ends of posts to keep posts from sinking in support material.
- 6. Assemble the main structure referring to the site plan and installation drawings for correct post and platform orientation. Make sure to attach and use connecting pieces (e.g. bridges, horizontal ladders, stairs and stair barriers, rigid tubes, etc.) to ensure the correct distances to adjacent main structure units, platforms or supports. It is very difficult to adjust post spacing once they are set in concrete.

## **GENERAL INSTALLATION GUIDELINES**

7. After each connecting section is attached, be sure to plumb and level each component and tighten all bolts, nuts and set screws. After tightening all bolts, nuts and set screws, make sure to check any exposed bolt ends to make sure they do not protrude beyond the face of the nut more than 2 threads as required in ASTM F1487 section 6.4.3.



**Figure 1: Thread Protrusion** 

If there are more than 2 threads protruding beyond the face of the nut, check for correct hardware and assembly first. If hardware and assembly are correct, there are several ways to remedy the exposed threads. You could use a shorter bolt, put extra washers behind the nut or cut the bolt removing the extra threads. If you cut the bolt, make sure to grind the ends so that they are free of burrs and sharp edges. If there are opposing bolts, such as on swing hangers, you can loosen one nut and tighten the other to even the protruding threads out

- 8. Once the central unit is in place, brace posts in vertical position until footings have been poured, recheck level and tighten all bolts, nuts and set screws. See corresponding installation drawings.
- 9. Attach safety enclosures (e.g. pipe walls, panels) on all platforms where other play components are not used. Tighten all bolts, nuts and set screws.
- 10. Attach other components (e.g. slides, arch ladders, cargo nets, etc.) next, according to their respective installation instruction drawings. Tighten all bolts, nuts and set screws.
- 11. Pour concrete footings. MAKE SURE UNIT IS PLUMB AND LEVEL BEFORE POURING CONCRETE FOOTINGS. See Typical Concrete Footings in Figure 2 through Figure 5 (Located on Page 7 through Page 9). After concrete footings have been poured and the concrete has set, backfill holes with dirt to reduce the potential of any concrete footing ever protruding above the resilient surfacing material
- 12. Clamp and Bracket Installation Guidelines:

#### Nucleus/Voltage/Intensity

Drill holes to pin or rivet mount brackets per instructions in installation drawings. This is VERY IMPORTANT. This will ensure that the components will not slide, slip, or rotate on the brackets. **NOTE:** In coastal areas, a clear silicone caulk (provided in installation kit with purchase of Burke Coastal Package) can be utilized to help seal the drilled holes prior to inserting rivets into the mount brackets. See typical mount bracket assembly drawings located in the installation instructions section.

## **GENERAL INSTALLATION GUIDELINES**

- 13. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines. See Resilient Surfacing Material, Figures 6 8, and Table 1 (located on pages 10 12).
- 14. Attach swings, rings, and tire swings after resilient surfacing material is in place. Completely close all "S" hooks. See ASTM Requirements for Fastening Devices in Figures 9 12 (located on page 13).
- 15. Attach Warning and Manufacturer labels. See Warning and Manufacturer Labels for instructions and Figures 13 14 (located on pages 14 15).
- 16. After installation is complete, inspect the entire unit. Make sure all fastening hardware and setscrews are tight, and all drive pins and rivets have been installed. Make sure all "S" hooks are completely closed. Check all coated parts to ensure coating is covering all metal; if not, follow repair instructions listed in the Maintenance section.
- 17. Most of our fasteners are precoated with a Loctite patch. As noted previously, fasteners should only be started for initial assembly so that the Loctite is not activated. Once you are going to tighten the hardware, use this list for standard fastener torque specs. Note: it may be necessary to tighten a bolt more than standard torques in order to have the assembly draw two parts together. We do not recommend the use of impact wrenches for the assembly of any playground components as they can damage the hardware, nutsert and component part.

1/4"-20	100 in-lb
5/16"-18	140 in-lb
3/8"-16	250 in-lb
7/16"-20	400 in-lb



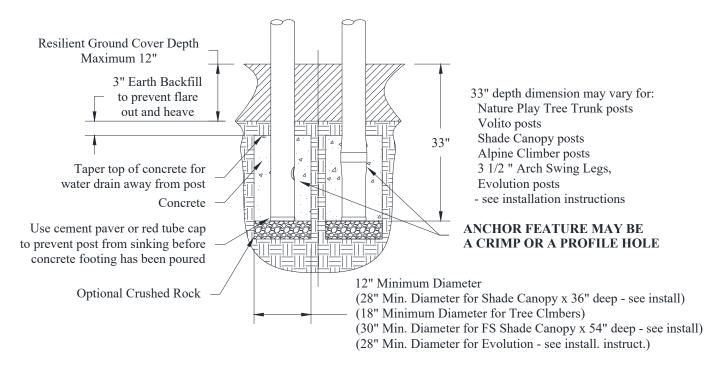
**NO IMPACT WRENCHES** 

Also note that fastener torque should not be tested after the Loctite has been activated or set up. It would take a much greater torque to break the screw loose, and that may cause the Loctite to not hold the screw tight.

18. We strongly recommend complete inspections for new structures occur within three (3) days after installation, within seven (7) days after installation and on a regularly scheduled basis thereafter. Playgrounds with heavy use should be inspected daily. For your convenience there is an Inspection Checklist (located on page 16).

## **TYPICAL CONCRETE FOOTINGS**

Burke specifies concrete in-ground footings, surface mount, and surface mount pier footings to provide the foundation for the playground structure. The details provided on this page recommend minimum footing requirements. This page is what you will reference when installation prints require you to see a typical footing detail. The following details are to be used on all Burke products unless specific dimensions are given on a particular component installation sheet.



**Figure 2: Support Post Footing Detail** 

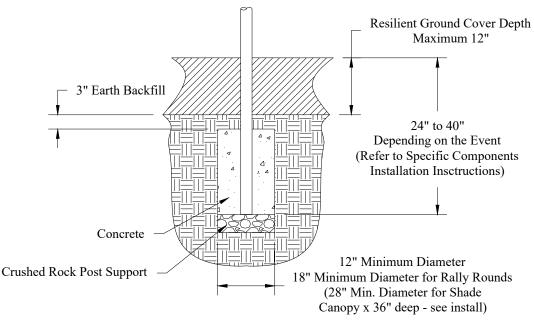
Support Post Footing Detail is used for the following:

- 5" OD TUBING
- 3 1/2" OD TUBING
- ALL SQUARE TUBING
- See Installation Instructions to determine depth of posts for SHADEPLAY CANOPIES and EVOLUTION tower structures.

#### **Special Considerations:**

- 1. Consult your local building codes to assure proper depth of footings. The required diameter and depth of the concrete can vary depending on soil conditions and temperature extremes.
- 2. In cold weather climates the concrete should be deep enough to reach below the frost line, especially the main support posts.
- 3. In sandy or loose soil conditions the diameter of the footing should be doubled to provide a stable support structure.
- 4. Use masonry bricks, gravel, or shims at the bottom of the footing holes in order to block up and plumb the posts and the platforms to the correct level.

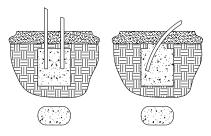
## **TYPICAL CONCRETE FOOTINGS**



**Figure 3: Play Event Footing Detail** 

The Play Event Footing Detail is used for the following:

- All tubing 2 3/8" OD and smaller
- All Playground Structure Play events
- 12' x 12' and 15' x 15' ShadePlay Canopy Posts (36" MIN DEPTH)
- 15' x 19' and HEX ShadePlay Canopy Posts (36" MIN DEPTH)



#### Figure 4: Optional Play Event Footing

Some play events have 2 supports close together or a single support that enters the ground at an angle. A trench like hole can be excavated to cover both situations as shown above. The starting size of the trench should adhere to the dimensions listed on the play event footing detail.

#### **Special Considerations:**

- 1. Consult your local building codes to assure proper depth of footings. The required diameter and depth of the concrete can vary depending on soil conditions and temperature extremes.
- 2. In cold weather climates the concrete should be deep enough to reach below the frost line, especially the main support posts.
- 3. In sandy or loose soil conditions the diameter of the footing should be doubled to provide a stable support structure.

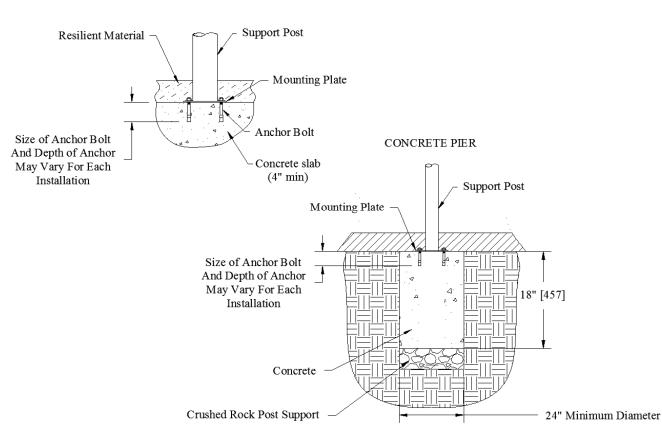
#### BCI Burke Company, LLC

660 Van Dyne Road • P.O. Box 549 • Fond du Lac, WI 54936-0549 • (920) 921-9220 • 1-800-356-2070 • Fax (920) 921-9566 <u>www.bciburke.com</u>

## **TYPICAL CONCRETE FOOTINGS**

When installing a surface mounted structure or event as seen in Figure 5, there may be multiple mounting plate styles depending on the type of supports involved. A hole is to be drilled and an anchor installed for each hole or slot in all mounting plates. Surface mounted events and structures are to be installed to concrete surfaces only. Concrete is to be a minimum of 4 inches in thickness and have a minimum strength rating of 3000psi for structures without shade canopies; 4000psi with shade canopies.

Burke recommends 1/2" diameter anchors, with the length based on the thickness of the concrete slab, the type of anchors and the recommendation of the anchor manufacturer. The pullout strength of each anchor should be a minimum of 2600 pounds. If there is a shade canopy on the structure, surface mounting must be approved by the factory first, and anchors used must be an epoxy based anchor with a minimum pullout strength of 4000 pounds.



CONCRETE SLAB

**Figure 5: Surface Mount Detail** 

#### **Special Considerations:**

- 1. Consult your local building codes to ensure the use of the proper anchor bolt size.
- 2. Concrete must have the proper amount of curing time to ensure that anchors have maximum holding power.
- 3. Existing concrete is to be free of cracks and heaving in areas where anchor bolts are to be installed.

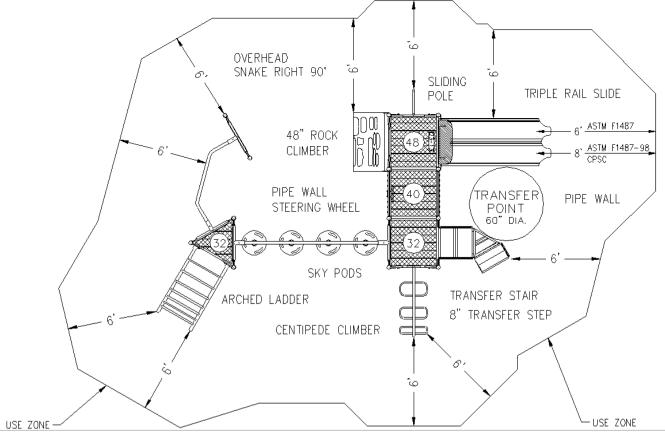
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## **RESILIENT SURFACING MATERIAL**

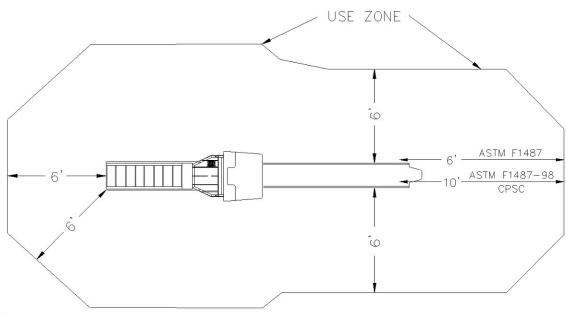
As the owner of a playground, you are responsible for understanding the recommendations for surfacing and providing and maintaining an appropriate impact attenuating surface material under and around all playground equipment.

Since the majority of playground injuries result from falls, use only a soft, resilient surface under and around play equipment. Never place play equipment on hard surfaces, such as concrete or asphalt. Grass surfaces are not recommended; compacted earth will not cushion falls. Shock-absorbing surfaces should meet the U.S. Consumer Product Safety Commission (CPSC) recommendations as detailed in *A Handbook for Public Playground Safety*. (Revision dated 1997, Publication No. 325, pages 3 through 6 and Appendix C pages 38 through 40), ASTM F1292: Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment and ASTM F1487: Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use. For installations in Canada, shock-absorbing surfaces should also meet the requirements of CAN/CSA Z614 Clause 10. Use the soft, resilient surface in the use zone or protective surfacing zone, which we have identified on the Site Plan Drawing. (Sample in Figure 6 below.) There are also additional space requirements called no-encroachment zones around moving equipment and slides, as required in CAN/CSA Z614. (Typically extending an additional 1.8 m beyond the protective surfacing zone. These are not shown on the plan drawings.)



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#### Figure 6: Sample Site Plan Drawing RESILIENT SURFACING MATERIAL



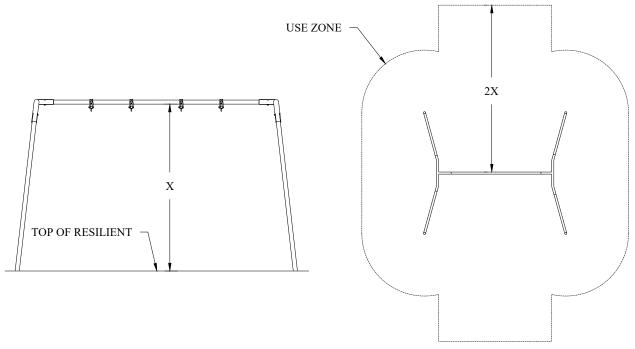
**Figure 7: Use Zone for Slides** 

The selection of the resilient surface should be based on the fall potential from the highest platforms as well as the height of the average user. For stationary components and slides it should extend a minimum of 6 feet in all directions as shown in Figure 7.

To the front and to the rear of to-fro swings, the use zone should extend a "minimum distance of 2X on a line extending 90° both front and rear from the longitudinal direction of the suspending beam, where X equals the vertical distance from the top of the protective surfacing to the pivot point of the swing" and the use zone for a rotating tire swing "shall be a minimum horizontal distance of Y + 72 in. (1830 mm) in all directions from pivot point of the swing, where Y equals the vertical distance between the pivot point and the top of the swing seat or suspended member." (ASTM F 1487 Pg. 13-14. A minimum horizontal distance of 2Y is required in Canada for rotating tire swings). See Figure 8 (Located on Page 12).

In addition to the use zone required in ASTM and CPSC, a no-encroachment zone may also be provided. This is an area in which the children run and play around the equipment. To prevent traffic conflicts, the no-encroachment zone should be free of any other equipment, trees, fencing, curbing, or other hazardous objects and should extend beyond the soft resilient surfacing a minimum of 6 feet. (No-encroachment zones for to-fro and tire swings are required in Canada).

## **RESILIENT SURFACING MATERIAL**



**Figure 8: Use Zones for To-Fro Swings** 

An impact attenuating surfacing material is required under and around all equipment. The Playground Surfacing Technical Information Guide published by the U. S. Consumer Product Safety Commission contains the results of tests performed to determine the relative shock-absorbing properties of seven loose-fill materials commonly used resilient surfacing. The report contains a table of Critical Heights, the height below which a life-threatening head injury would not be expected to occur, for each of the loose-fill surface materials tested. This information is available through the Consumer Product Safety Commission and is shown below in Table 1.

<b>Type of Loose-Fill Material</b>	Protects to fall height of:	
	Loose-fill material	
Wood Chips	9 inches	10 ft.
Wood Mulch (non-CCA)	9 inches	7 ft.
Shredded/recycled rubber	9 inches	10 ft.
Pea Gravel	9 inches	5 ft.
Sand	9 inches	4 ft.

<b>Table 1: CPSC Critical Fall Heights</b>	(taken from	pub. 325, p	bage 10)
--	-------------	-------------	----------

Manufactured surfaces, such as rubber matting materials, may also be suitable for use under and around playground equipment. Manufacturers of these surface materials should be contacted for specific information on the shock-absorbing performance and cost of their individual products.

## ASTM REQUIREMENTS FOR FASTENING DEVICES

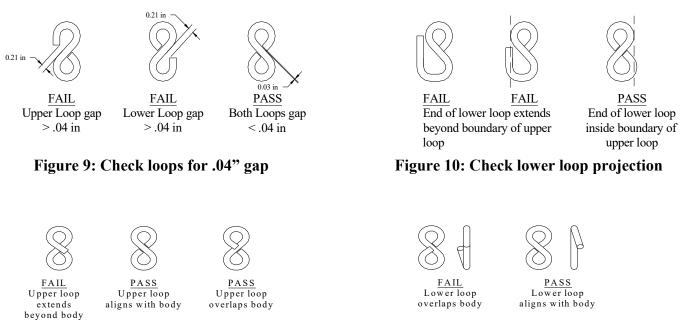




Figure 12: Check lower loop alignment

## **UPRIGHT POST NAMING SCHEME**

**0: STEEL IN GROUND 5: ALUMINUM IN GROUND** 8 STEEL SM 9 ALUMINUM SM XX: LENGTH X: MULTIPLES 1 - 72 S3 - 0 \*072 IS NEW 3XX: 3 ½" OD S: SWAGED PREFIX FOR 5XX: 5" OD C: CAPPED ALL POSTS R: ROOF **B: STUBBY- TOP STACK** T: TOP - ALUM ONLY

Figure 13: Upright Post Naming Scheme

#### The following is the <u>Owner's</u> responsibility. Please read it carefully.

Labels, as required by ASTM F 1487, CAN/CSA Z614, CPSIA and California law, have been included with this playground equipment and must be applied after installation is complete.

#### Instructions

- Choose highly visible label locations at a height of 4' to 5' above the resilient surfacing material. See Figure 13.
- The preferable location would be out of direct sunlight.
- Posts are the best location for labels. Do not place on PVC coated items or areas of high wear.
- Surface must be clean and dry prior to applying labels.
- Replacement labels are available upon request should a label become destroyed, mutilated or vandalized. Contact Burke Customer Service at 1-800-356-2070.



Age-appropriate Safety Labels with Manufacturer's Identification – You will receive labels with your equipment that designate the age appropriateness based on the specific components in your design. (Note: Three labels not shown here are those for 6-23 month olds, 4-5 year olds and 4-12 year olds. Age appropriateness is determined by ASTM requirements and CPSC recommendations.) Apply one label adjacent to or visible from the primary entrance to a structure and one label visible from another entrance on the opposite side of the structure. There should be a minimum of two labels on each play structure. Larger structures may have additional labels included. These labels should be placed near other entrances on opposite sides of the structure.

Burk	(e	BCI Burke Company, LLC Fond du Lac, WI USA 1-800-356-2070 www.bciburke.com
Order:	12	345
Structure	: 99	-99999-1
Date:	10	28/2016
Equipment identification	label for ent	ire play area unless otherwise labeled.

#### AWARNING

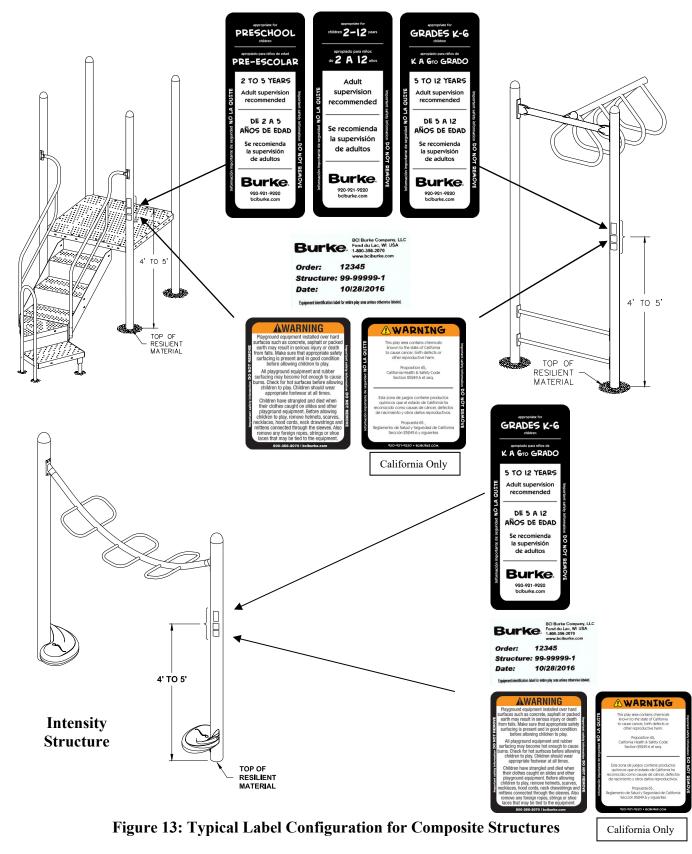
Playground equipment installed over hard surfaces such as concrete, asphalt or packed earth may result in serious linury or death from falls. Make sure that appropriate safety surfacing is present and in good condition before allowing children to play. All playground equipment and rubber surfacing may become hot enough to cause purch, check for hot surfaces before allowing children to play. Children should wear appropriate footwear at all times. Children have strangled and died when their clothes caught to nsides and other playground equipment. Before allowing children to play, remove helmets, scarves, necklaces, hood cords, neck drawstrings and mittens connected through the sleves. Also remove any foreign ropes, strings or shoe laces that may be tied to the equipment. **Equipment Identification Label and cover label -** Place this label and clear protective cover label on all equipment, either directly below the Age-appropriate designation or as the top most label for equipment that does not have a specific age-appropriate label. See Figures 13, 14 and 15. This label provides the tracking label information required by CPSIA.



Warning Labels - Place one directly underneath each of the Age-appropriate Safety Labels and/or Manufacturer's Identification Label. If you have additional labels they should be placed near other entrances on opposite sides of the structure.
Warning Labels are a Requirement in the ASTM F1487
Standard and they should serve as a constant reminder of the potential hazards associated with using the play equipment.
California Prop 65 Warning Label – Required in California only.

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## WARNING AND MANUFACTURER LABELS



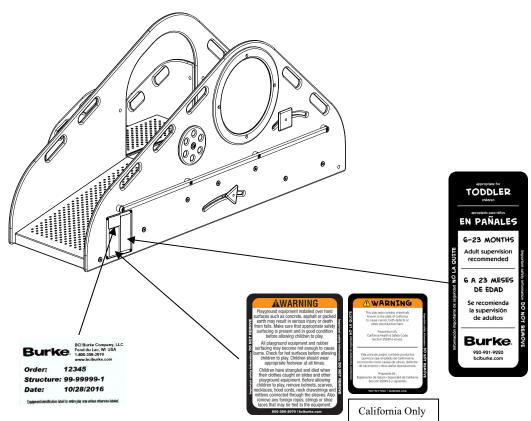


Figure 14: Typical Label Configuration for Composite Structures

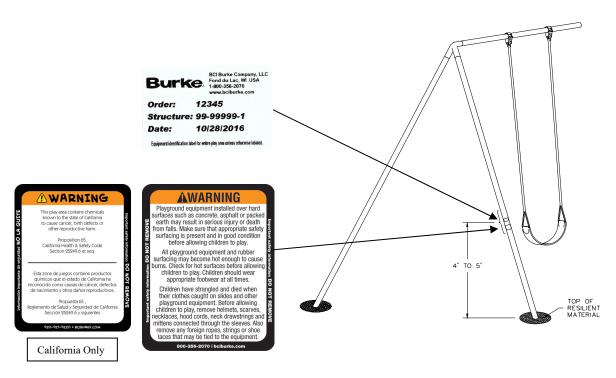


Figure 15: Typical Label Configuration for Non-Age Specific Equipment

## **INSPECTION CHECKLIST**

Review all Playground Installation Guidelines, particularly checking for specified dimensions. Make sure actual installation dimensions agree with the ones in the instructions.	Check height of all upper body equipment, such as horizontal ladders. The height of these components should agree with dimensions as specified in Playground Installation Guidelines when measured from top of the resilient surfacing material.
Double check deck heights. The height of the deck or platform is measured from the top of the resilient surfacing material to the top of the platform.	Touch up any scratches or installation damage to powder coated finish with color-matched spray paint supplied with the equipment.
Clean dried concrete off support posts and any other affected components	Touch up any exposed metal on coated parts following the instructions in the Maintenance section.
Review entire structure to insure that there are no completely bounded openings greater than 3 1/2" and less than 9". Completely bounded openings are openings that are enclosed on all sides.	Check ropes of rope climbers for any installation damage such as cuts that may expose the steel reinforcement strands.
Insure all post ends have properly installed post caps. Insure the drive rivets are secure.	Insure proper use zone has been allowed for equipment. See Site Plan Drawing included in this manual to check dimensions of required zone.
Insure all fasteners are tightened according to specifications listed on your installation instructions.	Dispose of all packaging material properly. Recycle appropriate materials and keep items like plastic bags out of reach or contact of small children.
Insure all "S" hooks are completely closed. An "S" hook is considered closed when there is no gap or space greater than .04" when measured with a feeler gauge, or the thickness of a dime.	Insure all support post connections are permanently secured. Insure all drive rivets and/or spring pins have been installed. Review installation instructions for specific locations.
Inspected by:	Inspection Date:
	BCI Burke Company, LLC For questions, call us at:

1-800-356-2070

Poorly Maintained playground equipment and surface areas can contribute to serious injury. Develop a comprehensive maintenance program, which should include staff training, use of inspection checklists, prompt repair of discovered problems and detailed documentation. To obtain more information, contact the U. S. Consumer Product Safety Commission (CPSC), Washington, D. C. 20207 (1-800-638-2772) and request "A Handbook for Public Playground Safety" Revised 1997.

#### **INSPECTIONS:**

It is critical to maintaining the long life of your equipment and preventing injuries, to establish a routine maintenance program.

Once your Burke equipment has been installed and your Final Inspection Check completed, we recommend a complete inspection within seven (7) days after installation and on a regularly scheduled basis thereafter. *Playgrounds with heavy use or in coastal areas should be inspected daily.* 

As a guideline, please see the **Frequency of General Maintenance** and **General Maintenance Checklist**, which provide charts with recommended frequency for inspections as well as suggested inspection areas of your play equipment.

#### Surfacing:

If you have loose surfacing materials, such as sand or wood chips, check for specified depth throughout the playground. Add new material as required.

If your safety surfacing is poured-in-place or a matting or tile, check for wear or damage.

## If your playground is installed in atmospheric conditions of high salt content, i.e. near the ocean, the chance for corrosion is much more likely. Therefore, frequent checks are highly recommended.

#### **Instructions for Inspection Checklist:**

- 1. Determine what is to be inspected and how frequently.
- 2. Establish a regular pattern of inspection.
- 3. File Inspection Report with your permanent records.
- 4. If a replacement part is needed, contact your local representative.
- 5. If repairs are needed, list action taken and date to be filed in your permanent records.

#### (Check Material Safety Data Sheet before starting to ensure safety.)

#### **PVC Coating Repair Instructions:**

- 1. Segregate the area of the equipment (by yellow tape, fencing, etc.) from children, where the repair is located.
- 2. Clean the area in need of repair.
  - a. Remove any coating that is loose; trim coating with a knife if necessary.
  - b. If there is any rust, remove and clean thoroughly.
- 3. Once clean, take container of repair material and open the spout and squeeze out the material into the cleaned area in need of repair.
  - a. Do not open container of repair material until ready to use.
  - b. As soon as you finish using the container with repair material, close it tightly immediately so it does not dry out.
- 4. Take a putty knife or similar tool to spread the material evenly. It should be at the same level thickness as the original coating when complete.
- 5. Let dry for about 15 minutes and recheck. As the material dries, it shrinks so you may need to add material repeating the same steps (3-4) mentioned above.
- 6. Once fully dry (1 full day to ensure proper cure), remove yellow tape, etc. that segregated the children from the area repaired. The children may be allowed to play again.

#### **Touch-up Painting Instructions:**

- 1. Segregate the area of the equipment (by yellow tape, fencing, etc.) from children, where the repair is located.
- 2. Clean area to be touched up by removing any loose paint or dirt particles and removing any rust with a light grit sand paper. Wipe area with clean cloth.
- 3. For best results, primer and touch up paint should be at room temperature. Avoid high heat and high humidity when applying the touch up paint. Shake can thoroughly to allow mixing ball to properly mix contents of the can.
- 4. For structures in coastal areas: Apply primer in *light* coats until area is covered. Allow primer to dry for 30 minutes (Primer is supplied with purchase of Burke Coastal Package).
- 5. For structures in coastal areas: Apply touch up paint in several light coats to cover the primed areas. Avoid drips and runs of the touch up paint for the best finish. Let dry for a minimum of 6 hours before use.

#### **Graffiti Remover:**

For proper use and best results of the Graffiti Remover that is supplied with each Burke Play Structure to remove unwanted marks or vandalism, please follow this procedure: **For Plastic, PVC coated, rubber or GFRC and rock holds:** 

- Lightly spray the affected area and wipe off with a dry cloth/towel. For stubborn marks, spray
  affected area and let sit for 15 seconds and then wipe off and dry with a cloth/towel.
  For Steel/Powder coated parts:
- 1. Spray a dry cloth/towel with the graffiti remover to get a small area of it wet. Wipe the area to be cleaned with that dampened cloth. Repeat if unwanted marks are still evident. Do not spray the Steel/Powder coated part directly or let the Graffiti Remover sit on the powder coated part for an extended period of time, as it could affect the finish/shine of the powder coat. Do not spray Graffiti Remover on bearings or other areas that require or hold grease.

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## **ShadePlay Canopy Instructions**

To clean shade canopy fabric use plain water to hose down the fabric and remove any debris. **DO NOT** use any type of detergent. Contact with organic solvents, halogens or highly acidic substances may reduce the service life of the fabric and void the warranty.

# CAUTION: The ShadePlay canopy must be removed from the play structure before inclement weather, severe wind storms or winter (snow) weather to prevent damage to the shade fabric or play structure.

To remove and later re-install the ShadePlay canopy, the quick release fastening mechanism will facilitate easy removal and re-installation.

To remove the ShadePlay canopy:

- 1. Remove end cap from end of tensioning rafter. See Figure 16.
- 2. Remove lower 3/8" x 2" button head cap screw and 3/8" locknut at the pivot joint that secures the tensioning arm in the closed position. See Figure 16.
- 3. DO NOT TRY TO REMOVE PIVOT PIN. It is locked into position with a set-screw located on the top side of the rafter.
- 4. Carefully push up tensioning arm into the 'Open Position'. See Figure 17.

#### WARNING: BE EXTREMELY CAREFUL WHEN PIVOTING TENSIONING ARM INTO OPEN OR CLOSED POSITION. TENSIONING ARM COULD SPRING UP DUE TO THE TENSION BEING APPLIED BY CANOPY CABLE SYSTEM AND COULD RESULT IN INJURY. KEEP HANDS AND FINGERS OUT FROM BETWEEN CANOPY AND ARM AND OUT OF PIVOT JOINT AREA.

- 5. Unhook shade canopy fabric, cable end(s) and/or turnbuckle from hook.
- 6. Carefully pull down tensioning arm into 'Closed Position' and install removed hardware securing end cap and tensioning arm in closed position.
- 7. Repeat steps 1 thru 6 as necessary for all tensioning rafters.
- 8. Fold or roll up ShadePlay canopy and store in dry safe location until ready to re-install.

To re-install the ShadePlay canopy:

- 1. Remove end cap from end of all rafters.
- 2. Remove lower 3/8" x 2" button head cap screw and 3/8" locknut at all the pivot joints that secure the tensioning arms in the closed position. See Figure 16.
- 3. Look to make sure pivot pin is in the pivot joint of all tensioning arms. See Figure 17.
- 4. Lay ShadePlay canopy over rafters and orientate it so that each tensioning arm has a canopy corner. See Figure 18.
- 5. Attach canopy to all rafters, with tensioning arms in open position attach the canopy corner, cable end and turnbuckle end onto hook.
- Continue to tighten canopy by carefully pulling tensioning arms down into 'Closed Position'. If canopy is too tight to pull arm down, loosen turnbuckle tension a small amount. See Figure 18.

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#### WARNING: BE EXTREMELY CAREFUL WHEN PIVOTING TENSIONING ARM INTO OPEN OR CLOSED POSITION. TENSIONING ARM COULD SPRING UP DUE TO THE TENSION BEING APPLIED BY CANOPY CABLE SYSTEM AND COULD RESULT IN INJURY. KEEP HANDS AND FINGERS OUT FROM BETWEEN CANOPY AND ARM AND OUT OF PIVOT JOINT AREA.

- 7. After all tensioning arms are in 'Closed Position' look around canopy for major wrinkles in fabric. The majority of wrinkles can be removed by moving the tensioning arms back into the 'Open Position' and tightening each turnbuckle a small amount. Repeat this process, tightening the turnbuckles only a small amount each time until the major wrinkles are eliminated. Minor wrinkles will disappear with time in the environment and in the stretched state. Tighten all turnbuckles evenly to spread tension. See Figure 18.
- 8. When tightening canopy is complete, secure tensioning arms with 3/8" x 2" button head cap screws and 3/8" locknuts. Tighten all hardware on pivot joint. See Figure 16.
- 9. Install end caps to all rafter ends using 3/8" x 3/4" SS button head cap screw (without locking thread) and 3/8" SS flat washer. See Figure 16.

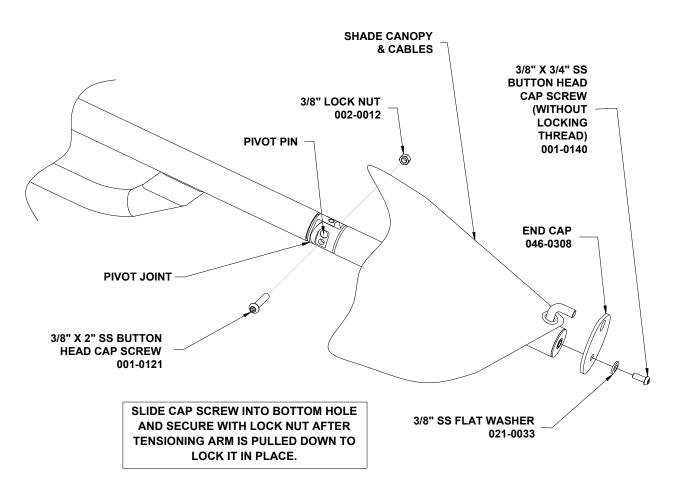


Figure 16: Tensioning Arm in 'Closed Position'

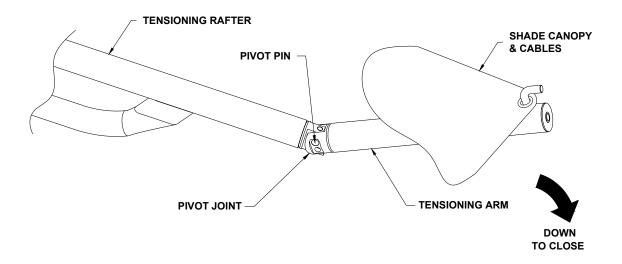
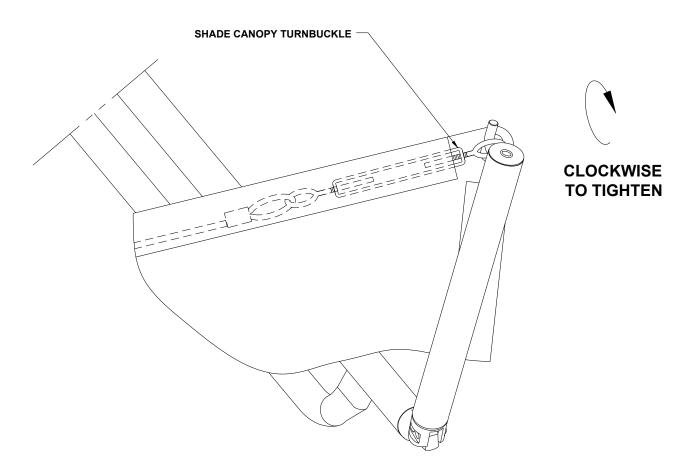
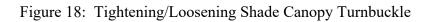


Figure 17: Tensioning Arm in 'Open Position'





## MAINTENANCE EZ Tension ShadePlay Canopy Instructions

To clean shade canopy fabric use plain water to hose down the fabric and remove any debris. **DO NOT** use any type of detergent. Contact with organic solvents, halogens or highly acidic substances may reduce the service life of the fabric and void the warranty.

# CAUTION: The EZ Tension ShadePlay canopy must be removed from the play structure before inclement weather, severe wind storms or winter (snow) weather to prevent damage to the shade fabric or play structure.

To remove and later re-install the EZ Tension ShadePlay canopy, the quick release fastening mechanism will facilitate easy removal and re-installation.

To remove the ShadePlay canopy:

- 1. Remove end caps from end of all tensioning rafters. See Figure 19.
- 2. Locate tension arms with 15/16" bolt head located at the end. Using a 15/16 socket rotate bolt head counter-clockwise to slide the holding pin upwards releasing the tension of the canopy.

#### WARNING: DO NOT USE ANY POWER TOOLS TO ROTATE THIS BOLT.

- 3. Remove lower 3/8" x 2" button head cap screw and 3/8" locknut at the pivot joint that secures the tensioning arm in the closed position. See Figure 19.
- 4. DO NOT TRY TO REMOVE PIVOT PIN. It is locked into position with a set-screw located on the top side of the rafter.
- 5. Carefully push up tensioning arm into the 'Open Position'. See Figure 20.

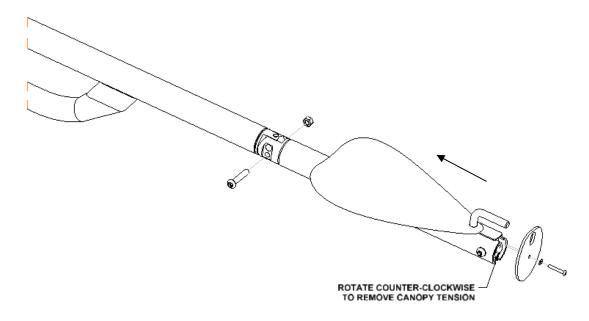


Figure 19: EZ Tension Arm in Closed Position

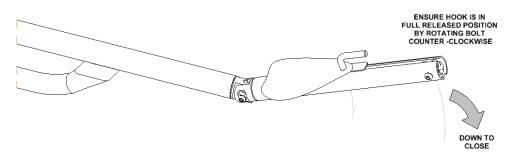


Figure 20: EZ Tension Arm in Open Position

#### WARNING: BE EXTREMELY CAREFUL WHEN PIVOTING TENSIONING ARM INTO OPEN OR CLOSED POSITION. TENSIONING ARM COULD SPRING UP DUE TO THE TENSION BEING APPLIED BY CANOPY CABLE SYSTEM AND COULD RESULT IN INJURY. KEEP HANDS AND FINGERS OUT FROM BETWEEN CANOPY AND ARM AND OUT OF PIVOT JOINT AREA.

- 6. Unhook shade canopy fabric, cable end(s) and/or turnbuckle from hook.
- 7. Carefully pull-down tensioning arm into 'Closed Position'
- 8. Rotate bolt clockwise to move the holding pin back to the end in the closed position.

#### WARNING: DO NOT USE ANY POWER TOOLS TO ROTATE THIS BOLT.

- 9. Install removed hardware securing end cap and tension arm in closed position.
- 10. Repeat steps 1 thru 6 as necessary for all tensioning rafters.
- 11. Fold or roll up EZ Tension ShadePlay canopy and store in dry safe location until ready to reinstall.

To re-install the ShadePlay canopy:

- 1. Remove end caps from ends of all rafters.
- 2. With tension arms in open position, attach canopy corners to the hooks located at the end of the tensioning arms shown in Figure 20. Ensure the hooks are in the fully released position before attaching canopy by rotating the bolt counter-clockwise.
- 3. Begin tightening the shade canopy by pulling all of the tension arms into the closed position shown in Figure 19. When arms are in closed position, insert hardware to lock arms in place.
- 4. Using a 15/16" socket, turn the bolt head located in the end of the mechanisms until the hook holding the canopy is flush with the end of the tube. Clockwise rotation will apply tension to the canopy and counter-clockwise rotation will release the tension of the canopy.

#### WARNING: DO NOT USE ANY POWER TOOLS TO TURN BOLT THIS MUST BE DONE WITH A SOCKET WRENCH

- 5. Look around at the shade canopy for small wrinkles in the fabric. Wrinkles can be removed by removing the tension in the canopy by turning the bolt counter-clockwise and moving the tension arms back into the open position and tightening the turnbuckles a small amount (1/4 1/2 inch).
- 6. Install end caps to ends of rafters.

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## **Sensory Panel Maintenance and Troubleshooting**

#### **Care and Maintenance**

Please refer to the installation instructions for details on battery installation. Apart from replacing the batteries from time to time, the unit is virtually maintenance free and has no other user-serviceable parts. Any attempt to tamper with the unit in any way other than advised in this guide will void the unit warranty.

#### Cleaning

DO NOT use any chemicals or abrasive cleaners on the electronics control housing, sensors or speaker grill. Use a household hand pump water sprayer (the type you would water small household plants with) with a solution of water and a mild household detergent (the type you would use to clean your dishes) and gently spray the unit and wipe off with a soft damp cloth. DO NOT use a pressure washer or high powered hose to clean the unit.

#### **Speaker Grill**

Keep the speaker grill clean and clear of dirt and obstructions. The speaker itself is a marine grade external speaker and it will not get damaged by cleaning with water. DO NOT attempt to push anything through the speaker grill to clear any obstructions as this may damage the speaker membrane and/or reduce the water-resistance of the whole unit.

Fault	Solution
Low or decreased volume	• Ensure that the speaker grill is clear from obstruction. Volume is set at 75% during manufacture. If more volume is required, please seek advice from the manufacturer. Tampering with the electronic circuitry will void the warranty.
Not all the sensors are activating the sound replay	• Check that the speaker and sensor connectors are securely seated.
Water or evidence of water inside the electronic housing	• If water is found inside the housing please contact the manufacturer immediately.

#### **Troubleshooting Guide**

Fault	Solution
No sound or intermittent sound with older batteries	<ul> <li>Check that batteries are firmly seated between the terminals in the battery holder and are in the correct orientation. Check that the speaker and sensor connectors are securely seated.</li> <li>Make certain that the sound chip on the printed circuit board has not been dislodged. If you suspect that it is dislodged, see the instructions below.</li> <li>Replace the batteries with high-quality alkaline batteries (i.e. Duracell Ultra or better).</li> </ul>
No sound or intermittent sound with new batteries	• Allow at least five minutes for the batteries and unit to acclimatize to the environment.
	• Check that batteries are firmly seated between the terminals in the battery holder and are in the correct orientation. Check that the speaker and sensor connectors are securely seated.
	• Make certain that the sound chip on the printed circuit board has not been dislodged. If you suspect that it is dislodged, see the instructions below.
	• To eliminate the possibility of a faulty battery, replace the batteries with another set of high-quality alkaline batteries (i.e. Duracell Ultra or better). Again, allow at least five minutes for the batteries and unit to acclimatize to the environment.
The sound chip appears to be dislodged from its housing	• If ALL of the pins on the chip appear in or directly above the corresponding socket on the housing, a light and even pressure may be used to re-seat the chip. IMPORTANT – excessive or uneven pressure may cause the chip to be damaged. If in doubt, contact the manufacturer.
	• If the pins are not located in or directly above the corresponding housing socket, DO NOT attempt to use pressure to re-seat the chip. Contact the manufacturer for advice.
No sound or intermittent sound when all previous solutions have been exhausted	• The unit and its components have been designed to be easily swapped out by a skilled service technician. In the rare event of failure, please contact the manufacturer for assistance. Any attempt to tamper with the unit in any way other than advised in this guide will void the unit warranty.

## **Climbing Rope Maintenance**

- A routine check per the Maintenance Checklist is very important.
- Address any issues early!
- Monitor wear versus mis-use / vandalism.
- Avoid sand as a resilient material.



## **Addressing Frayed/Cut Ropes**

- Simple flaming technique with a handheld propane torch approved by rope manufacturer. Contact your Burke Representative for Details.
- Swift, sweeping motion with handheld torch so as not to burn or scorch the rope.
- Monitor wear of rope AFTER flaming is done.
- When metal strands are very evident, rope should be purchased / replaced.

## MAINTENANCE GFRC Maintenance

#### **GFRC - Cleaning Methods**

- 1. For smaller surface areas, a scrub brush and light cleaning detergent mixed with water is the best approach. A ZEP exterior siding cleaner can be heavily diluted and scrubbed on and off with the brush.
- 2. For larger areas, you can use a pressure washer. The pressure washer should be no greater than a 1500 PSI washer. Use a 25 to 40-degree wide nozzle to prevent surface damage of the topical paints on the theme finishes. Hold the nozzle a minimum of 2' away from the surface. Clean a small, hidden test area before starting the project to ensure the pressure washer will not damage the surface. Pressure washers generate very high pressure, so it's essential to take safety precautions and follow all the manufactures instructions when using them:
  - Use both hands when holding the spray nozzle.
  - Don't use pressure washers while standing on a ladder.
  - Wear protective eyewear at all times.
  - Never point the nozzle at anyone.
- 3. An alternative to using a pressure washer is to use a *home-washing kit* that attaches to the garden hose. The kits aren't as quick or as effective as pressure washers but are easier to use and are available at most local hardware stores.

#### **GFRC - Cleaning**

- 1. Cover or remove anything you don't want wet or washed from the area that is to be cleaned.
- 2. Check the theme finishes for trouble spots that are covered in mildew, mold or moss. To determine whether a trouble area is affected by mildew, apply a small amount of diluted household bleach to the area. If it clears up, the problem is mildew. Pressure washers usually don't remove mildew, so you'll need to clean those areas by hand. Scrub off the mildew using a solution of 9 parts water and 1 part bleach.
- 3. If using a power washer with a soap feed, you may use a mild solution of water and detergent, or you may also use a ZEP cleaner or alternative that is specifically for power washers, following the instructions for that specific cleaner.
- 4. If there is indication of efflorescence on the GFRC surface, this can be cleaned with a 10% muriatic acid solution.
- 5. Remember, always perform cleaning on test area and inspect for damage before proceeding.
- 6. Begin spraying the surface, holding the nozzle at a 45-degree angle. Work from the bottom up, and move across the surface from side to side at a steady pace, maintaining the 2' distance between the surface and the nozzle head.
- 7. Rinse with clean water from the top down to prevent streaks.

#### **GFRC - Repairing**

- 1. Minor scuff marks can be painted with the touch up repair kit provided. Multiple colors are provided in order to blend in with the original theme and markings.
- 2. If damage requires patching, a standard water plug kit for concrete repair can be purchased at any local hardware store. Follow the instructions for repair, making sure to create a similar surface texture of rock or tree bark in the concrete while it is still wet.
- 3. Once concrete patch is dry it can be painted with the touch up repair kit provided.

#### BCI Burke Company, LLC

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## MAINTENANCE ZipVenture Maintenance and Inspection

ZipVenture products should be inspected and maintained as specified for all playground equipment. The following are additional maintenance and inspection procedures specific to the ZipVenture products.

#### **Tools Required:**

- 1. 8-ft step ladder
- 2. Ratchet wrench with Burke security bits
- 3. 9/16" & 3/4" sockets for ratchet wrench
- 4. Torque wrench
- 5. 50-lb weight with means of attaching to trolley seat (Burke recommends a sand bag and nylon webbing strap)

#### Maintenance and Inspection Points:

- 1. Visually inspect entire structure for:
  - a. Loose, frayed, or tangled wires from wire rope
  - b. Broken springs at either end of cable
  - c. Loose spring brake parts (springs should be affixed to the cable at one end and not able to slide away)
  - d. Screws missing from spring brake parts
- 2. Move trolley to 20 feet from arrival (low) end of ride. Measure from the loop at the end of the wire rope. Holding seat level, measure distance from top of resilient material to bottom of seat. This should be in the range of 13 to 15 inches. If not, the tension in the wire rope will need to be adjusted. Make sure resilient material is maintained to the proper level and is consistent each time you are measuring.
- 3. Attach 50-lb weight to seat of trolley. With the trolley in the same 20 feet from arrival end position, and holding seat level, measure distance from top of resilient material to bottom of seat. This should be in the range of 11 to 13 inches. If not, the tension in the wire rope will need to be adjusted. Make sure the resilient material is maintained to the proper level and is consistent each time you are measuring.
- 4. Check tightness of fasteners. Wire rope clips should be tightened to 45 ft-lb torque.
- 5. Use ladder to inspect wire rope at center, both ends and also under the springs. As you inspect the wire rope, note that a strand is a group of wires twisted together, and multiple strands are then twisted around a central core to form the wire rope or cable. You should inspect the individual wires and the strands for any broken wires or excessive wear. If there are any broken wires, strands out of place or excessive wear, the cable should be replaced.
- 6. At the ends of the cable, there is a thimble inside the loop for reinforcement. If the thimble or the swaged fitting at the launch end of the cable is cracked, split, or broken, that piece or the entire cable (in the case of the swaged end) shall be replaced.
- 7. Using the ladder, remove the outer covers from the trolley. Remove the nuts from the bolts that hold the trolley case together and remove one side of the case. Roll the trolley back and forth a few inches on the rope and observe the pulleys. If a pulley does any of the following, replace both pulleys:
  - a. Fails to roll and slides along the rope,
  - b. Has its inner race rotate with the outer part of the pulley,

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- c. Makes a clicking noise, or
- d. Wobbles (make sure it is the pulley, not the mounting bolt moving)
- 8. Inspect the sliders which cover the holes where the rope enters and exits the trolley. If they are broken or worn to less than 3/32" (.094) thick at any point then replace all of the sliders.
- 9. Inspect the pendulum and bronze bearing attached to the trolley which support the seat chain. If the bronze bearing is excessively worn (oblong hole, split or cracked) or missing then replace the bearing.
- 10. Reassemble trolley and replace the covers. Make sure to apply Loctite when reattaching the hardware.
- 11. Check the link at the launch end and the turnbuckle at the arrival end. Both should move freely up and down, left and right. If not then the spherical bearings should be replaced.
- 12. Check the spring assemblies at both ends. Look for broken or bent springs, damage to the plastic parts that secure the springs, missing set screws, and wear of the rubber bumpers. Replace any parts that need it.

Note: All bearings are lubricated for life. If a bearing is worn out then it must be replaced.

## **Frequency of General Maintenance**

How Often	Check	Swings	Slides	Climbers	Structures	Animals	Whirls
Daily	Open S Hooks	X		Х	Х		
Daily	Broken Anchor Bolts	Х	Х	Х	Х	Х	Х
Daily	Worn Chains	Х		Х	Х		
Daily	Broken Guardrails/Handrails	Х	Х	Х	Х	Х	Х
Daily	Sharp Edges	Х	Х	Х	Х	Х	Х
Daily	Loose or Missing Nuts/Bolts	Х	Х	Х	Х	Х	Х
Daily	Sharp Points/Protrusions	Х	Х	Х	Х	Х	Х
Daily	Unplugged Holes in Pipe	Х	Х	Х	Х	Х	Х
Daily/Weekly	Broken Welds	Х	Х	Х	Х	Х	Х
Daily/Weekly	Inadequate Surfacing	Х	Х	X	Х	Х	Х
Daily/Weekly	Ropes for cuts or fraying with exposed steel reinforcement strands			Х	Х		
Daily/Weekly	Vandalized or Cracked PVC Coating	Х		Х	Х		
Weekly	Worn Pinions/Clevises	Х		Х	Х		
Weekly	Exposed Footings	Х	Х	Х	Х	Х	Х
Weekly	Worn Bearings	Х			Х		Х
Weekly	Rust of Metal	Х	Х	Х	Х	Х	Х
Weekly	Corrosion of Aluminum	Х	Х	Х	Х	Х	Х
Monthly	Add grease lubrication to wheel bearings	Х			Х		Х
Monthly	Play Mat (integrity and adhesion to surface if applicable)	Х	Х	Х	Х	Х	Х
Spring/Fall	Pinch Points	Х	Х	Х	Х	Х	Х
Inclement Weather (High winds, Snow)	Remove Shade Canopy/ARA Shade				Х		

## **General Maintenance Checklist**

Date			T	I						
		-								 
Visible cracks, bending, warping		 								
Accessible sharp edges of points		 _								 
Rusted metal surfaces		 								
Rusting of metal and corrosion on										
aluminum		 								
Deformation of open hooks, rings, links,*										
etc.		 _								
Worn swing hangers and chain		 							 	 
Missing or damaged swing seats		 _								<b></b>
Heavy swing seats with sharp corners or*										
edges										
Broken supports/anchors										
Jagged, exposed or cracked and loose										
concrete footing										
Inadequate surfacing material under *										
equipment										
Exposed ends of pipe. Missing caps or *										
plugs										
Protruding bolt ends *										
Chipped or peeling paint										
Cuts or fraying in rope with exposed										
steel reinforcement strands										
Vandalism, broken glass, trash, etc.										
Broken or missing rails, steps, rungs,										
seats										
Loose or missing hardware										
Crush or Shear points *										
Moving components, etc.										
Lack of lubrication on moving parts										
Worn bearings										
Poor drainage areas at footings, slide										
exits, etc										
Vandalized or cracked PVC coating			1							
	 	 	1	1	I	L	L	۱ <u> </u>		

\*for further definition, reference ASTM F1487

#### **Directions:**

- 1. Start by reading instructions
- 2. Write in date of inspection
- 3. Check each item of inspection as it applies to your equipment
- 4. Make copy and file with your permanent records

## SUGGESTED PUBLIC PLAYGROUND LEADERS CHECKLIST

- Prepare written guidelines for playground operation, defining goals and procedures.
- Provide for constant supervision by establishing a written schedule.
- Conduct daily cleaning and check for broken glass and other litter.
- Do not permit children to use wet or damaged equipment.
- Constantly observe play patterns to note possible hazards and suggest appropriate equipment or usage changes.
- Prepare written accident reports with special attention to surface conditions, type and extent of injury, age and sex of child, how the accident occurred, and weather conditions.
- Insist on first aid and accident training for playground leaders.
- Instruct children and playground supervisors on how to use equipment. (Playground equipment safety should be taught in the classroom.)
- Do not permit too many children on the same piece of equipment at the same time; suggest that children take turns, or direct their attention toward other equipment or activities.
- Make periodic checkups and request that worn or damaged pieces of equipment be replaced.

BCI Burke Company, LLC

For questions, call us at:

1-800-356-2070

## BCI Burke Generations Warranty<sup>®</sup> The Longest and Strongest warranty in the industry

BCI Burke Company, LLC ("Burke") warrants that all standard products are warranted to be free from defects in materials and workmanship, under normal use and service, for a period of one (1) year from the date of invoice.

## We stand behind our products.

In addition, the following products are warranted, under normal use and service from the date of invoice as follows:

- One Hundred (100) Year Limited Warranty on aluminum and steel upright posts (including Intensity<sup>®</sup>, Voltage<sup>®</sup>, Nucleus<sup>®</sup> and Little Buddies<sup>®</sup>) against structural failure due to corrosion, deterioration or workmanship.
- One Hundred (100) Year Limited Warranty on KoreKonnect<sup>®</sup> clamps against structural failure due to corrosion, deterioration or workmanship.
- One Hundred (100) Year Limited Warranty on Hardware (nuts, bolts, washers).
- One Hundred (100) Year Limited Warranty on bolt-through fastening and clamp systems (Voltage<sup>®</sup>, Intensity<sup>®</sup>, Nucleus<sup>®</sup> and Little Buddies<sup>®</sup>).
- Twenty-Five (25) Year Limited Warranty on spring assemblies and aluminum cast animals.
- Fifteen (15) Year Limited Warranty on main structure platforms and decks, metal roofs, table tops, bench tops, railings, loops and rungs.
- Fifteen (15) Year Limited Warranty on all plastic components including StoneBorders against structural failure due to materials or workmanship.
- Ten (10) Year Limited Warranty on ShadePlay Canopies fabric, threads, and cables against degradation, cracking or material breakdown resulting from ultra-violet exposure, natural deterioration or manufacturing defects. This warranty is limited to the design loads as stated in the specifications.
- Ten (10) Year Limited Warranty on NaturePlay<sup>®</sup> Boulders and GFRC products against structural failure due to natural deterioration or workmanship. Natural wear, which may occur with any concrete product with age, is excluded from this warranty.
- Ten (10) Year Limited Warranty on Full Color Custom Signage against manufacturing defects that cause delamination or degradation of the sign. Full Color Custom Signs also carry a two (2) year warranty against premature fading of the print and graphics on the signs.
- Five (5) Year Limited Warranty on Intensity<sup>®</sup> and RopeVenture<sup>™</sup> cables against premature wear due to natural deterioration or manufacturing defects. Determination of premature wear will be at the manufacturer's discretion.
- Five (5) Year Limited Warranty on swing seats and hangers; Kid Koaster<sup>®</sup> Trolleys and other moving parts against structural failure due to materials or workmanship.
- Three (3) Year Limited Warranty on electronic panel speakers, sound chips and circuit boards against electronic failure caused by manufacturing defects.

The warranty stated above is valid only if the equipment is erected in conformity with the layout plan and/or installation instructions furnished by BCI Burke Company, LLC using approved parts; have been maintained and inspected in accordance with BCI Burke Company, LLC instructions. Burke's liability and your exclusive remedy hereunder will be limited to repair or replacement of those parts found in Burke's reasonable judgment to be defective. Any claim made within the above stated

#### BCI Burke Company, LLC

660 Van Dyne Road • P.O. Box 549 • Fond du Lac, WI 54936-0549 • (920) 921-9220 • 1-800-356-2070 • Fax (920) 921-9566 <u>www.bciburke.com</u> warranty periods must be made promptly after discovery of the defect. A part is covered only for the original warranty period of the applicable part. Replacement parts carry the applicable warranty from the date of shipment of the replacement from Burke. After the expiration of the warranty period, you must pay for all parts, transportation and service charges.

Burke reserves the right to accept or reject any claim in whole or in part. Burke will not accept the return of any product without its prior written approval. Burke will assume transportation charges for shipment of the returned product if it is returned in strict compliance with Burke's written instructions.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IF THE FOREGOING DISCLAIMER OF ADDITIONAL WARRANTIES IS NOT GIVEN FULL FORCE AND EFFECT, ANY RESULTING ADDITIONAL WARRANTY SHALL BE LIMITED IN DURATION TO THE EXPRESS WARRANTIES AND BE OTHERWISE SUBJECT TO AND LIMITED BY THE TERMS OF BURKE'S PRODUCT WARRANTY. SOME STATES DO NOT ALLOW THE EXCLUSION OF CERTAIN IMPLIED WARRANTIES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

Warranty Exclusions: The above stated warranties do not cover: "cosmetic" defects, such as scratches, dents, marring, or fading; damage due to incorrect installation, vandalism, misuse, accident, wear and tear from normal use, exposure to extreme weather; immersion in salt or chlorine water, unauthorized repair or modification, abnormal use, lack of maintenance, or other cause not within Burke's control; and

Limitation of Remedies: Burke is not liable for consequential or incidental damages, including but not limited to labor costs or lost profits resulting from the use of or inability to use the products or from the products being incorporated in or becoming a component of any other product. If, after a reasonable number of repeated efforts, Burke is unable to repair or replace a defective or nonconforming product, Burke shall have the option to accept return of the product, or part thereof, if such does not substantially impair its value, and return the purchase price as the buyer's entire and exclusive remedy. Without limiting the generality of the foregoing, Burke will not be responsible for labor costs involved in the removal of products or the installation of replacement products. Some states do not allow the exclusion of incidental damages, so the above exclusion may not apply to you.

## **Terms of Sale**

**Pricing:** Prices published in this catalog are in USD, are approximate and do not include shipping & handling, surfacing, installation nor applicable taxes.

All prices are subject to change without notice. Contact your Burke representative for current pricing. Payments are to be made in USD.

Weights: Weights are approximate and may vary with actual orders.

**Installation:** All equipment is shipped unassembled. For a list of factory-certified installers in your area, please contact your Burke representative.

**Specifications:** Product specifications in this catalog were correct at the time of publication. However, product improvements are ongoing at Burke, and we reserve the right to change or discontinue specifications without notice.

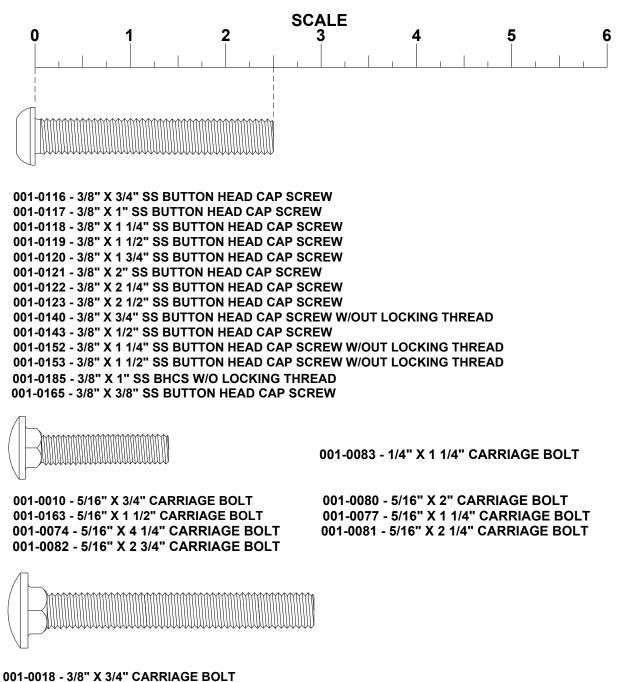
**Loss or Damage in Transit:** A signed bill of lading is our receipt from a carrier that our shipment to you was complete and in good condition upon arrival. Before you sign, please check the Bill of Lading carefully when the shipment arrives to make sure nothing is missing and there are no damages. Once the shipment leaves our plant, we are no longer responsible for any damage, loss or shortage.

For more information regarding the warranty, call Customer Service at 920-921-9220 or 1-800-356-2070.

### APPENDIX

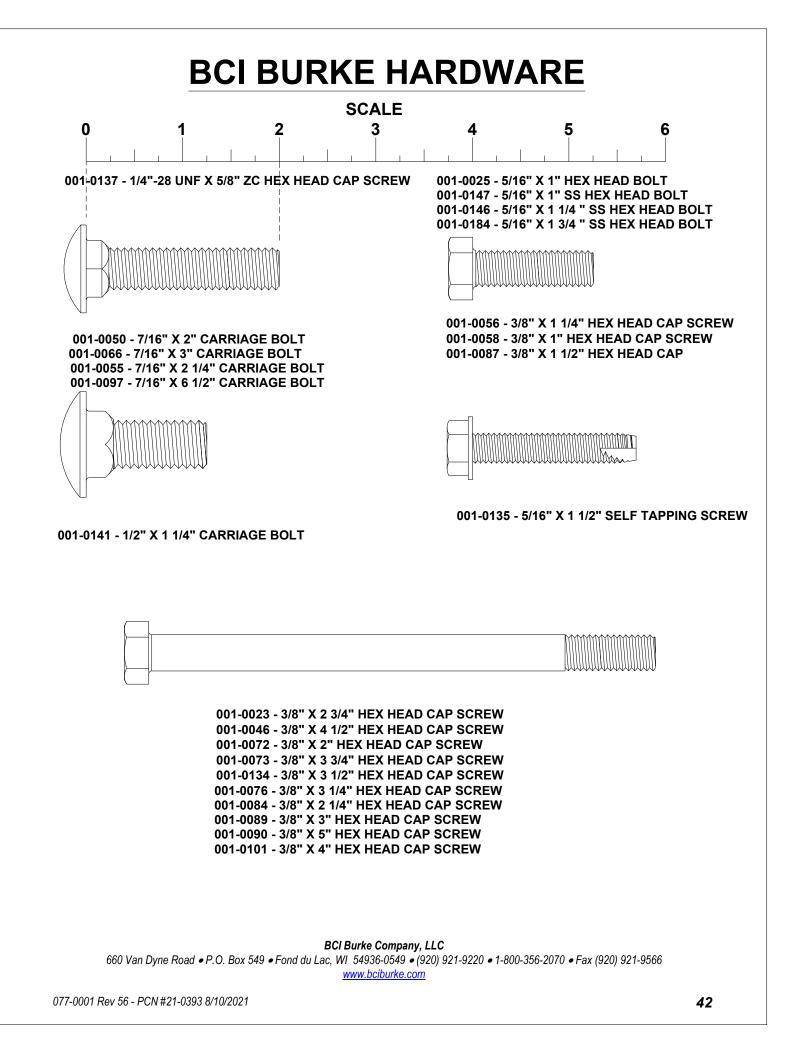
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# **BCI BURKE HARDWARE**

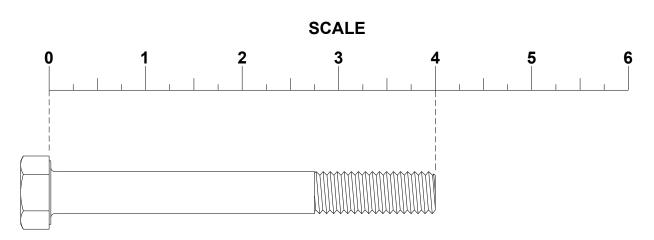


001-0018 - 3/8" X 3/4" CARRIAGE BOLT 001-0048 - 3/8" X 2 3/4" CARRIAGE BOLT 001-0098 - 3/8" X 3" CARRIAGE BOLT 001-0053 - 3/8" X 2 1/4" CARRIAGE BOLT 001-0039 - 3/8" X 2 1/2" CARRIAGE BOLT 001-0054 - 3/8" X 2 1/2" CARRIAGE BOLT 001-0068 - 3/8" X 1 1/4" CARRIAGE BOLT

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# **BCI BURKE HARDWARE**



001-0096 - 7/16" X 3 1/2" HEX HEAD CAP SCREW 001-0132 - 7/16" X 4" HEX HEAD CAP SCREW 001-0062 - 7/16" X 1 1/4" HEX HEAD CAP SCREW 001-0049 - 7/16" X 4 1/2" HEX HEAD CAP SCREW



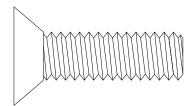
001-0037 - 7/16" X 3" HEX HEAD CAP SCREW - SLOTTED 001-0047 - 7/16" X 4 1/2" HEX HEAD CAP SCREW - SLOTTED

001-0099 - 1/2" X 4 1/2" HEX HEAD CAP SCREW 001-0057 - 1/2" X 1 1/4" HEX HEAD CAP SCREW

001-0160 - 1/2" X 1 1/4" HEX HEAD CAP SCREW - GRADE 8

001-0170 - 1/2" X 5" FULLY THREADED HEX HEAD SCREW

001-0186 - 3/8" X 1 1/4" SS FLAT COUNTERSUNK HEAD CAP SCREW



001-0139 - 1/2" X 1 3/4" SS FLAT COUNTERSUNK HEAD CAP SCREW







002-0003 - 5/16" LOCK NUT

002-0012 - 3/8" LOCK NUT 002-0018 - 3/8" NUT 002-0036 - 3/8" SS NUT

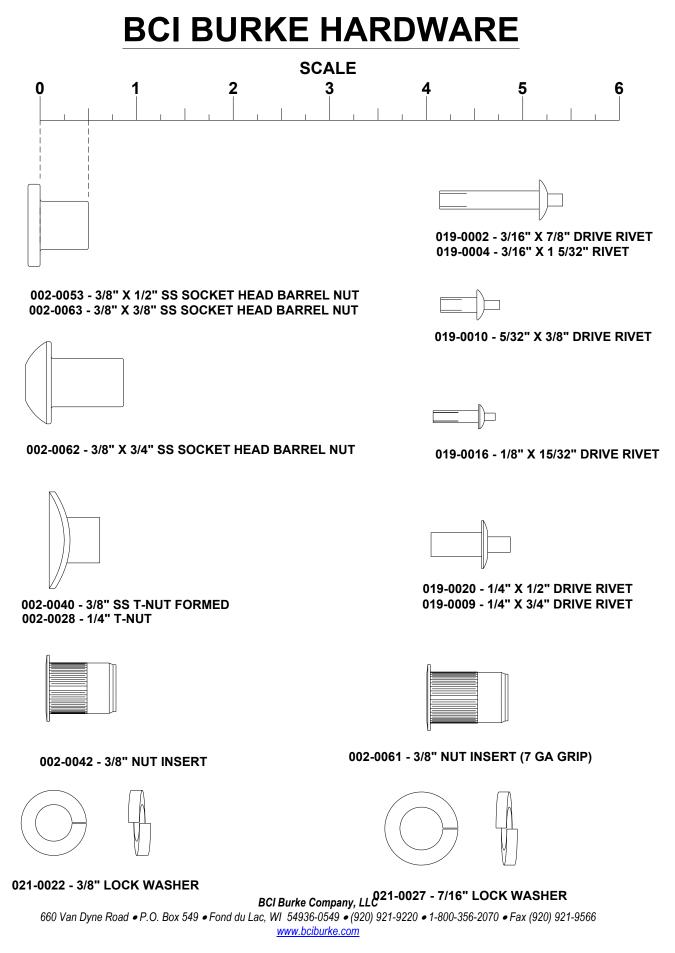
002-0005 - 7/16" LOCK NUT



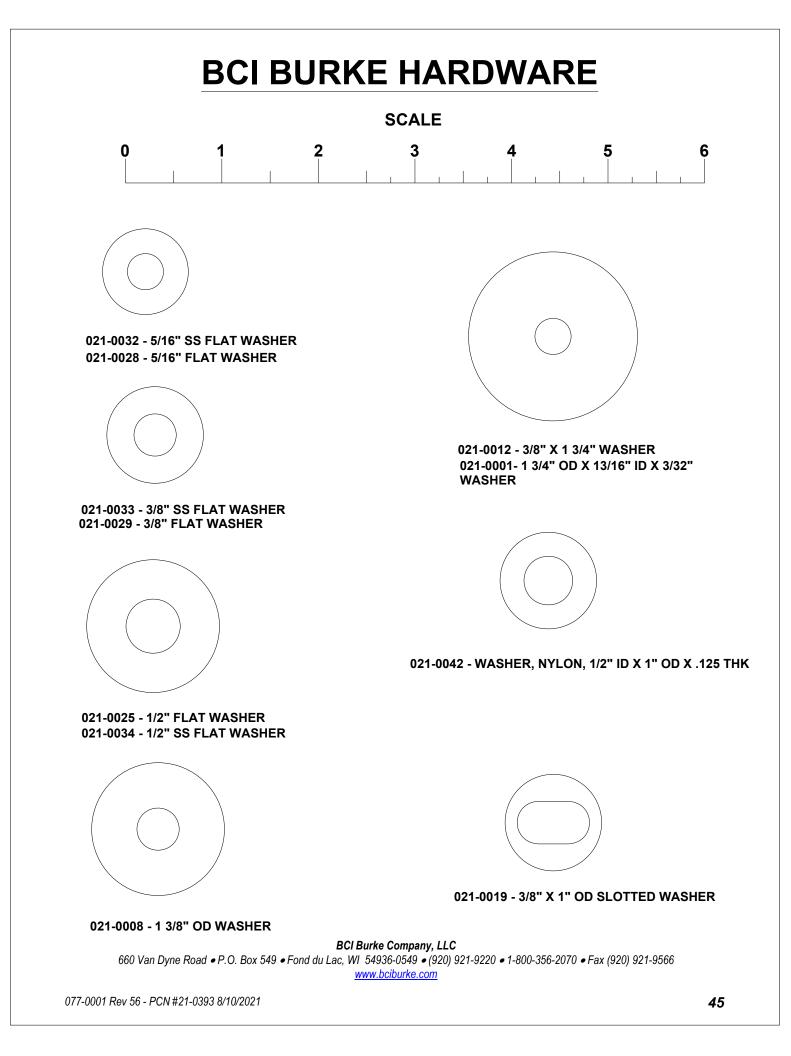
002-0004 - 1/2" LOCK NUT 002-0049 - 1/2" SS LOCK NUT

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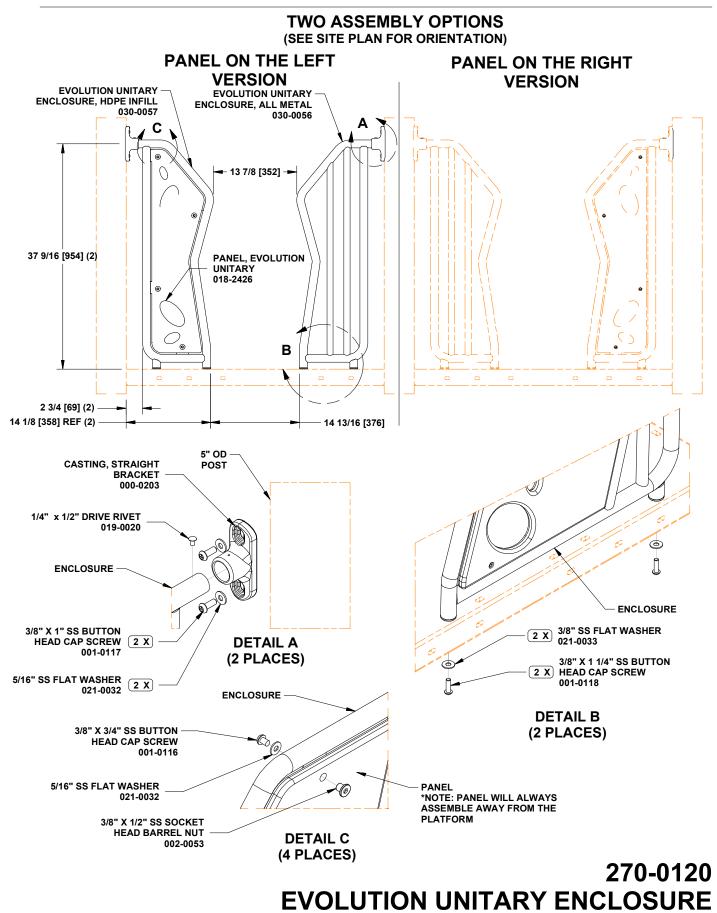


**Installation Instructions** 

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P.O. Box 549 Fond du Lac, WI 54936-0549

PARTS LIST				SPECIFICATIONS		
PART NO.	DESCRIPTION	QTY		CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat-		
000-0203	CASTING, STRAIGHT BRACKET	2		Treated. Finished with baked on powder coating.		
018-2426	PANEL, EVOLUTION UNITARY	1		PANEL, EVOLUTION UNITARY: 3/4" Extruded HDPE.		
030-0056	EVOLUTION UNITARY ENCLOSURE, ALL METAL	1		EVOLUTION UNITARY ENCLOSURE, ALL METAL: One peice all welded construction consisting of 1.315" OD x 12 GA and		
030-0057	EVOLUTION UNITARY ENCLOSURE, HDPE INFILL	1		1.029" OD x 14 GA galvanized steel tubing. Finished with baked on powder coating.		
036-1544		<u>1</u>		EVOLUTION UNITARY ENCLOSURE, HDPE INFILL: One peice all welded construction consisting of 1.315" OD x 12 GA galvanized steel tubing and 10 GA galvanized steel sheeting. Finished with baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless Steel.		
	ardware package(s) may include extra hard necessary for this installation.	aware		SHIPPING WEIGHT: 34 LBS.		

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

1. Insert CASTING, STRAIGHT BRACKETs onto ends of EVOLUTION UNITARY ENCLOSURE, ALL METAL and EVOLUTION UNITARY ENCLOSURE, HDPE INFILL and fasten the top hole of castings to the posts using hardware specified in DETAIL A.

2. Rotate unitary enclosures up 90 degrees and fasten bottom hole of castings to posts using hardware specified in DETAIL A.

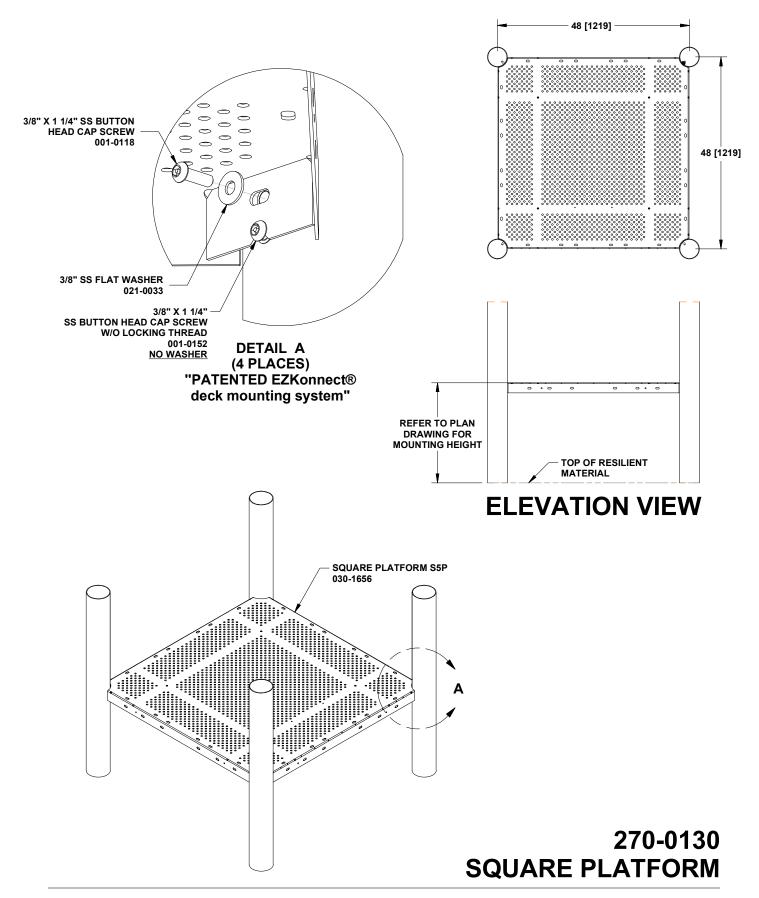
3. Rotate unitary enclosures down 90 degrees and attach to platform using hardware specified in DETAIL B.

4. Drill 1/4" diameter hole through the castings and enclosures, using the pilot hole in the castings. Drive in rivet, as specified in DETAIL A, until center pin is flush.

5. Attach PANEL, EVOLUTION UNITARY to enclosure using hardware specified in DETAIL C. Panel should be on the side away from the platform.

6. Tighten all hardware.





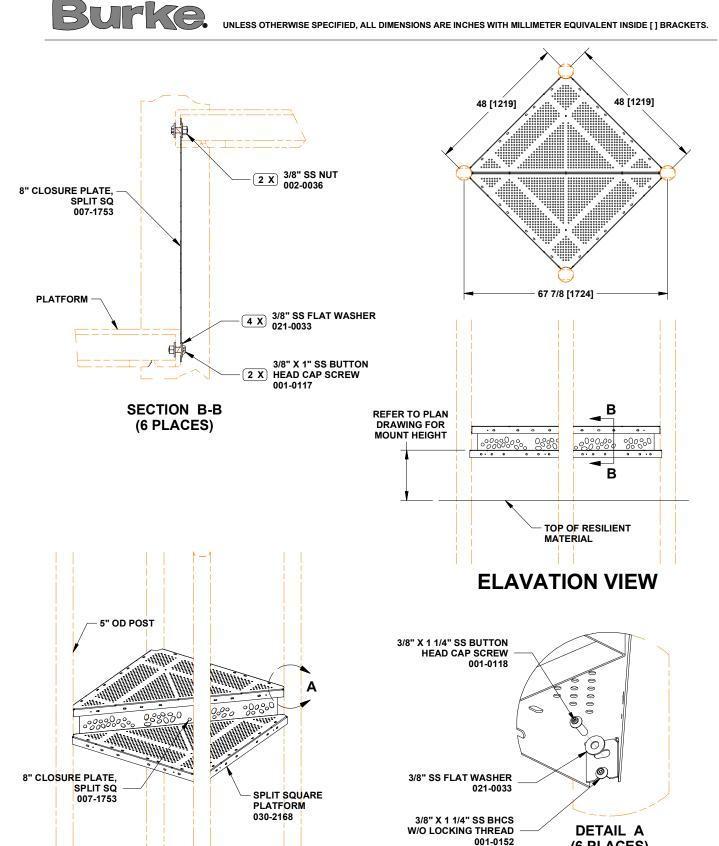
	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	QTY	SQUARE PLATFORM S5P: 12 GA HRPO sheet, finished with a
030-1656	SQUARE PLATFORM S5P	1	PVC Coating.
036-1101	HARDWARE PACKAGE	1	HARDWARE PACKAGE: Stainless steel.
NOTE: Hai	rdware package(s) may include extra ha ecessary for this installation.	ardware	SHIPPING WEIGHT: 106 LBS.
			hales of words hadens installation
NOTE: PVC	coating may need to be removed fro	noles of parts before installation.	

NOTE: Do not tighten hardware until instructed to do so.

- 1. Locate the double sets of platform mounting holes in each post.
- Attach with patented EZKonnect® deck mountiing system. Partially thread a 3/8" x 1 1/4" SS button head cap screw
   W/O LOCKING THREAD into the lower hole of the double set of mounting holes WITHOUT a washer.

DO NOT TIGHTEN. See DETAIL A.

- 3. Slide the four corners of the SQUARE PLATFORM onto the partially threaded cap screws on each post.
- Complete attaching platform to posts by using 3/8" x 1 1/4" SS button head cap screws and 3/8" SS flat washers to secure platform into upper mounting hole. See DETAIL A.
- 5. Level platform and plumb posts.
- 6. Tighten all hardware.
- 7. Pour concrete. Let set for two to three days.
- 8. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



# \*NO WASHER (6 PLACES)

## 270-0301 SPLIT SQUARE PLATFORM, CLOSURE PLATE

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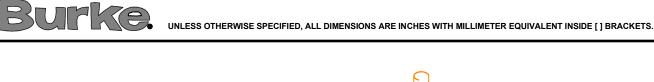
**BCI Burke Company, LLC** 

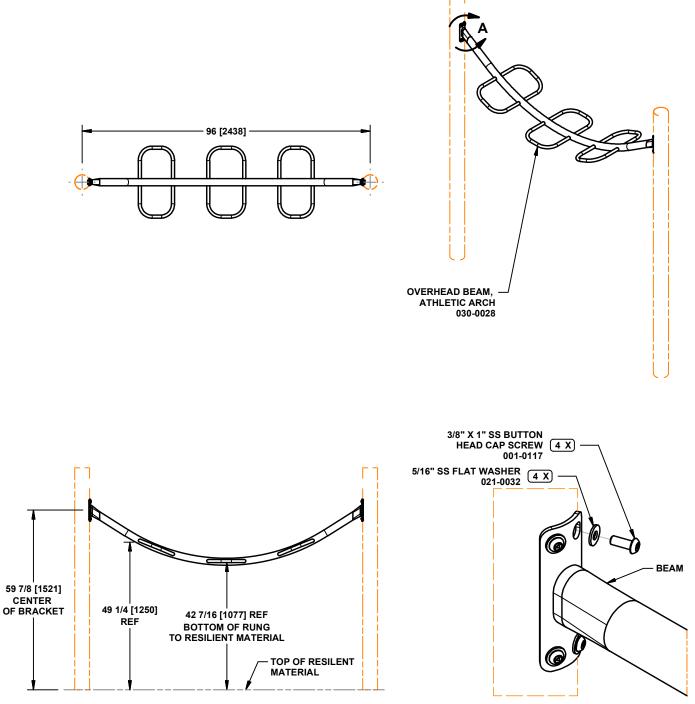
	PARTS LIST		] [	SPECIFICATIONS
PART NO.	DESCRIPTION	QTY		8" CLOSURE PLATE, SPLIT SQUARE: 14 GA galvanized steel
007-1753	8" CLOSURE PLATE, SPLIT SQ	1		plate finished with a baked-on powder coating.
030-2168	SPLIT SQUARE PLATFORM	2		SPLIT SQUARE PLATFORM: 12 GA HRPO sheet, finished with
036-1107	HARDWARE PACKAGE	1		a PVC Coating
				HARDWARE PACKAGE: Stainless steel
NOTE: Hat is not	ardware package(s) may include extra har necessary for this installation.	dware		SHIPPING WEIGHT: 108 LBS.

#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Locate the double sets of platform mounting holes in each post.
- 2. Partially thread a 3/8" x 1 1/4" SS button head cap screw W/O LOCKING THREAD into the lower hole of the double set of mounting holes WITHOUT a washer. **DO NOT TIGHTEN**. See DETAIL A.
- 3. Slide the three corners of the SPLIT SQUARE PLATFORM onto the partially threaded cap screws on each post.
- 4. Complete attaching platform to posts by using 3/8" x 1 1/4" SS button head cap screws and 3/8" SS flat washers to secure platform into upper mounting hole. See DETAIL A.
- 5. Level platform and plumb posts.
- Attach CLOSURE PLATE to platforms using 3/8" x 1" SS button head cap screws, 3/8" washers, and 3/8" nuts. See SECTION B-B.
- 7. Tighten all hardware.
- 8. Pour concrete. Let set for two to three days.
- 9. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

270-0301 SPLIT SQUARE PLATFORM, CLOSURE PLATE REV: 00 PCN: 21-0094 3/31/2021





DETAIL A (2 PLACES)

## 370-0030 ATHLETIC ARCH 2-5

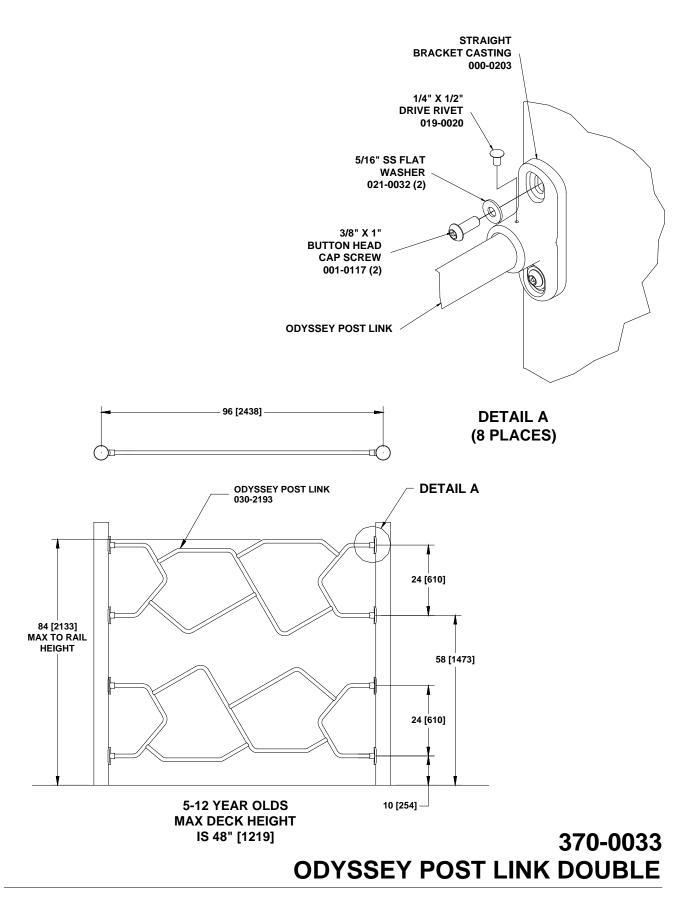
PARTS LIST		SPECIFICATIONS
PARTS LIST         PART NO.       DESCRIPTION         030-0028       OVERHEAD BEAM, ATHLETIC ARCH         036-0258       HARDWARE PACKAGE	QTY 1 4	SPECIFICATIONS         OVERHEAD BEAM, ATHLETIC ARCH: One piece all welded construction consisting of 2 3/8" OD x 10 GA & 1.029" OD x 14 GA galvanized steel tubing, and 7 GA galvanized steel plate. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel.
<b>NOTE:</b> Hardware package(s) may include extra hard that is not necessary for this installation.	dware	SHIPPING WEIGHT: 46 LBS.

NOTE: Do not tighten hardware until instructed to do so.

- 1. Attach OVERHEAD BEAM, ATHLETIC ARCH to posts using hardware specified in DETAIL A.
- 2. Plumb and level components. Tighten all hardware.
- 3. Pour concrete and allow concrete to set for 2-3 days.
- 4. Install resilient surfacing material in accordance to installation guidelines, ASTM standards, CPSC guidelines.



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.



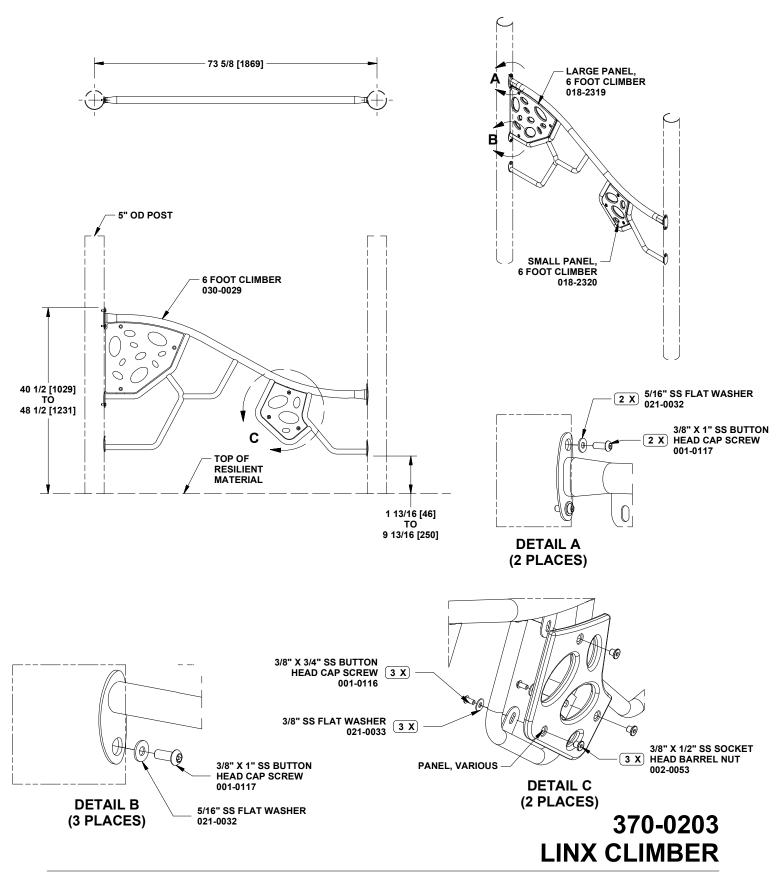
P.O. Box 549 Fond du Lac, WI 54936-0549

	PARTS LIST		Г	SPECIFICATIONS
PART NO. 000-0203 030-2193 036-0258 036-0819	DESCRIPTION CASTING, STRAIGHT BRACKET ODYSSEY POST LINK HARDWARE PACKAGE HARDWARE PACKAGE	<u>QTY</u> 8 2 8 4		SPECIFICATIONS CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating. ODYSSEY POST LINK : Weldment consisting of formed 1.315" OD x 12 GA galvanized tubing. Finished with a baked on powder coat finish. HARDWARE PACKAGE: Stainless steel. HARDWARE PACKAGE: Aluminum Rivets
Note: Hardw that is not ne	rare package(s) may include extra harc ecessary for this installation.	iware		SHIPPING WEIGHT: 79 LBS.

- 1. Dig footing holes per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Locate mounting holes for ODYSSEY POST LINKS on 5" OD posts.
- 3. Sleeve CASTING BRACKET onto ends of ODYSSEY POST LINKS. See DETAIL A.
- 4. Place ODYSSEY POST LINKS with brackets into position with 5" OD posts and fasten using hardware specified in DETAIL A.
- 5. Tighten all hardware.
- 6. Drill 1/4" diameter holes through pilot hole in mount bracket and into enclosure. Drive rivets flush with brackets and handrails. See DETAIL E.
- 7. Block-up, level and plumb climber.
- 8. Pour concrete. Let set for two to three days.
- 9. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

370-0033.doc Description: ODYSSEY POST LINK DOUBLE REV: 00 PCN: 12-0167 12/3/2012



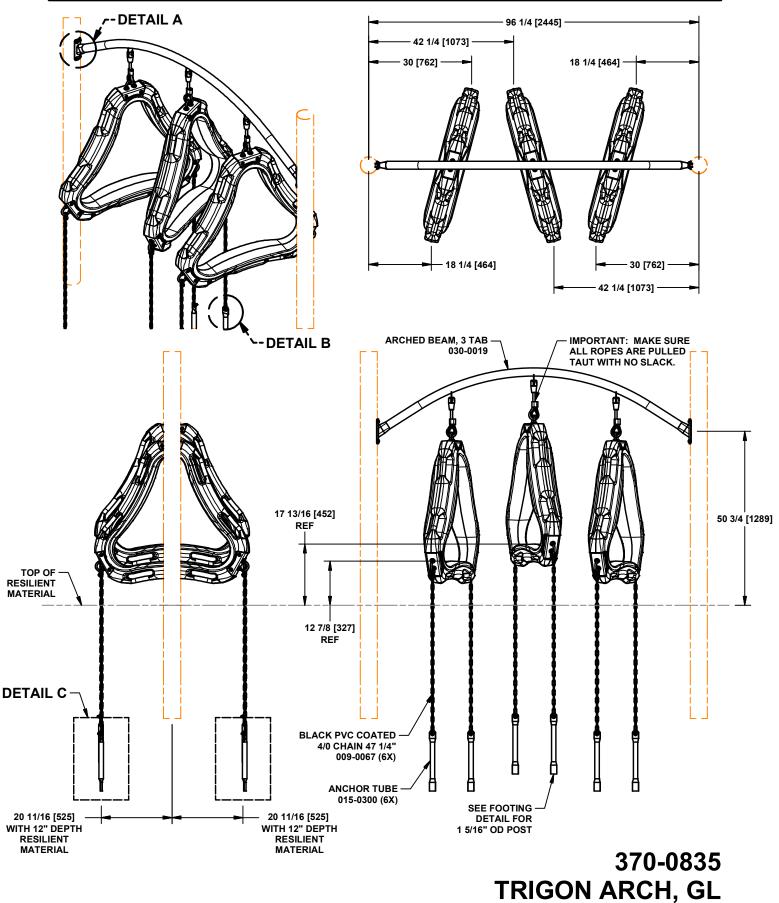


	PARTS LIST			SPECIFICATIONS
PART NO.	DESCRIPTION	QTY		ARGE PANEL, 6 FOOT CLIMBER; SMALL PANEL, 6 FOOT
018-2319	LARGE PANEL, 6 FOOT CLIMBER	1	<u>C</u>	CLIMBER: 3/4" extruded HDPE.
018-2320	SMALL PANEL, 6 FOOT CLIMBER	1		FOOT CLIMBER: One piece, all welded construction
030-0029	6 FOOT CLIMBER	1		onsisting of 1.900" OD X 11 GA and 1.315" OD X 12 GA alvanized steel tubing, 7 GA stainless steel sheeting, and 10
036-0040	HARDWARE PACKAGE	1		GA galvanized steel sheeting. Finished with a baked on powder
036-1416	HARDWARE PACKAGE	1		oating.
NOTE: H	proware package(s) may include extra hard	Ware		IARDWARE PACKAGE; HARDWARE PACKAGE: Stainless teel.
	ardware package(s) may include extra hard necessary for this installation.	ware	\$	SHIPPING WEIGHT: 111 LBS.

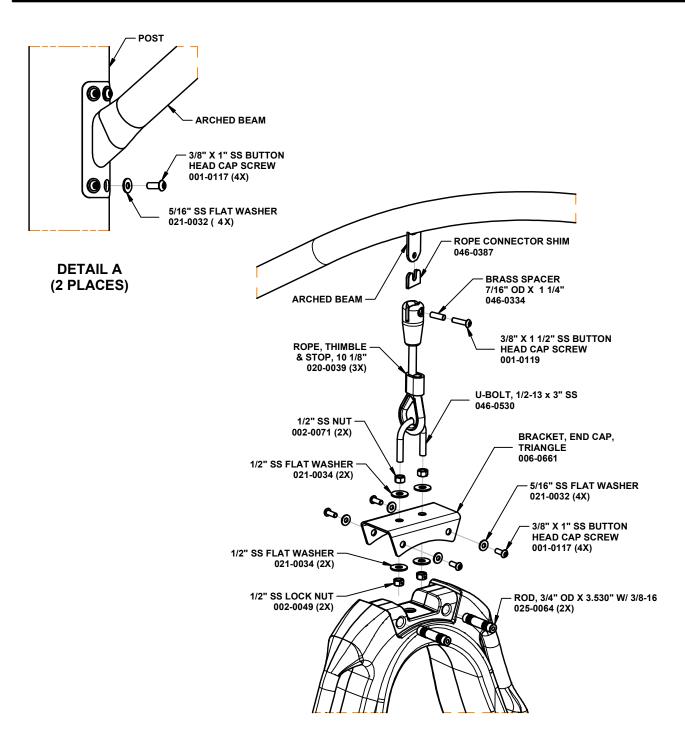
- 1. Attach 6 FOOT CLIMBER to 5" OD POSTS using hardware specified in DETAIL A and DETAIL B.
- 2. Attach LARGE PANEL, 6 FOOT CLIMBER and SMALL PANEL, 6 FOOT CLIMBER to 6 FOOT CLIMBER using hardware specified in DETAIL C.
- 3 Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

370-0203 LINX CLIMBER REV: 00 PCN: 22-0016 1/17/2022





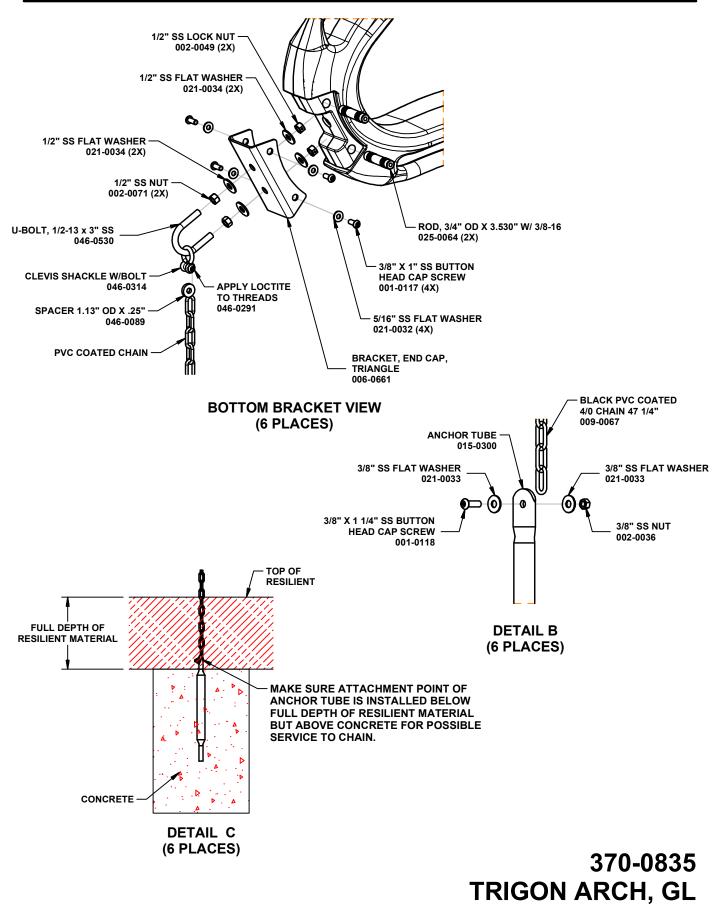




TOP BRACKET VIEW (3 PLACES)

## 370-0835 TRIGON ARCH, GL





PART NO.	DESCRIPTION	QTY
006-0661	BRACKET, END CAP, TRIANGLE	9
009-0067	BLACK PVC COATED 4/0 CHAIN 47 1/4"	6
015-0300	ANCHOR TUBE	6
018-0917	TRIANGLE CLIMB THROUGH	3
020-0039	ROPE, THIMBLE & STOP, 10 1/8"	3
025-0064	ROD, 3/4" OD X 3.530" W/ 3/8-16	18
030-0019	ARCHED BEAM, 3 TAB	1
036-1423	HARDWARE PACKAGE	1
046-0089	SPACER 1.13" OD X .25"	6
046-0291	LOCTITE	1
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	3
046-0530	U-BOLT, 1/2"-13 x 3" SS	9

#### SPECIFICATIONS =

<u>BRACKET, END CAP, TRIANGLE</u>: Formed 10 GA galvanized sheet steel. Finished with a baked on powder coating.

BLACK PVC COATED 4/0 CHAIN 47 1/4": Galvanized 4/0 straight coil chain with Black PVC coating.

ANCHOR TUBE: 1.315" OD x 12 GA galvanized steel tubing.

TRIANGLE CLIMB THROUGH: A minimum of .22" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction and a textured outside surface.

<u>ROPE, THIMBLE & STOP, 10 1/8</u>": Rope consists of 6 right hand, regular lay strands, closed around a synthetic fiber core, with each preformed strand consisting of 8 galvanized steel wires tightly covered with multifilament polypropylene fibers. Aluminum and stainless steel end connectors and ferrules.

ROD, 3/4" OD X 3.530" W/ 3/8-16: 3/4" OD stainless steel rod.

<u>ARCHED BEAM, 3 TAB</u>: One piece all welded construction consisting of formed 2 3/8" OD x 10 GA galvanized steel tubing, 7 GA stainless steel formed plate and 8 GA galvanized steel plate. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel hardware, 5/16" Shackle with a 3/8" X 1 1/2" bolt, and black thermoplastic.

SPACER 1.13" OD X .25": 1/4" Nylatron GS.

LOCTITE: Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and cumene hydroperoxide.

BRASS SPACER 7/16" OD X 1 1/4": Brass Tube 7/16" OD X .028" Wall.

U-BOLT, 1/2"-13 x 3" SS: Stainless steel.

**NOTE:** Hardware package(s) may include extra hardware that is not necessary for this installation.

#### SHIPPING WEIGHT: 151 LBS.

### INSTALLATION INSTRUCTIONS

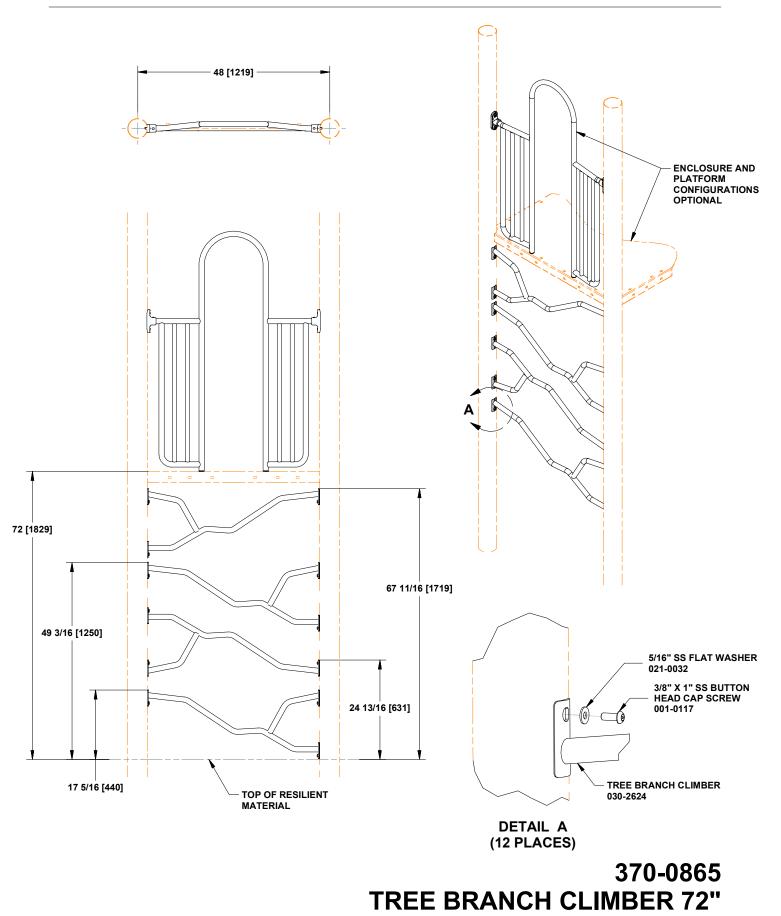
NOTE: Do not tighten hardware until instructed to do so.

- 1. Dig footing holes per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Install the ARCHED BEAM, 3 TAB to the posts using the hardware shown in DETAIL A. Tighten all hardware.
- 3. Install U-BOLT, 1/2-13 x 3" SS into ROPE, THIMBLE & STOP, 10 1/8" as shown in TOP BRACKET VIEW.
- 4. Install U-BOLT, 1/2-13 x 3" SS into CLEVIS SHACKLE W/BOLT as shown in BOTTOM BRACKET VIEW.
- Install nut and washer onto U-BOLT, then install U-BOLT ASSEMBLY into BRACKET, END CAP, TRIANGLE.
   NOTE: A couple of threads will need to be left visible on U-BOLT (U end) to keep U-BOLT from bottoming out on TRIANGLE CLIMB THROUGH.
- 6. Install washer and lock nut to secure U-BOLT as shown in TOP BRACKET VIEW and BOTTOM BRACKET VIEW.
- 7. Press ROD, 3/4" OD X 3.530" W/ 3/8-16 into TRIANGLE CLIMB THROUGH holes as shown in TOP BRACKET VIEW and BOTTOM BRACKET VIEW. Press in until flush.
- 8. Assemble the BRACKET ASSEMBLIES to the TRIANGLE CLIMB THROUGH corners using hardware specified in TOP BRACKET VIEW and BOTTOM BRACKET VIEW.
- 9. Install rope connector shim to ARCHED BEAM, 3 TAB as shown in TOP BRACKET VIEW.
- 10. Install ROPE ASSEMBLY to ARCHED BEAM and secure with BRASS SPACER 7/16" X 1 1/4", rope connector shim and bolt as shown in TOP BRACKET VIEW.
- 11. Attach BLACK PVC COATED 4/0 CHAIN 47 1/4" and SPACER 1.13" OD X .25" to CLEVIS SHACKLE as shown in BOTTOM BRACKET VIEW. Add LOCTITE to SHACKLE BOLT.
- 12. Fasten PVC coated chain to ANCHOR TUBE using hardware shown in DETAIL B.
  - NOTES:
    - A. See DETAIL C to determine anchor tube attachment point for loose fill and unitary rubber surface.
    - B. Make sure ropes and chain are pulled taut with no slack. Failure to adjust this properly may cause premature wear of the rope.
    - C. Chains may need re-adjustment during routine maintenance checks.
- 13. Block-up, level and plumb entire structure.

14. Tighten all hardware.

- 15. Pour concrete. Let set for two to three days.
- 16. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





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Telephone 920-921-9220

PARTS LIST		SPECIFICATIONS
PART NO. DESCRIPTION           030-2624         TREE BRANCH CLIMBER           036-0040         HARDWARE PACKAGE		TREE BRANCH CLIMBER: One piece all welded construction consisting of 1.315" OD x 12 GA galvanized steel tubing, and 7 GA stainlees steel sheet. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless Steel.
<b>NOTE:</b> Hardware package(s) may inclue that is not necessary for this installation.	de extra hardware	SHIPPING WEIGHT: 33 LBS.

NOTE: Do not tighten hardware until instructed to do so.

1. Locate correct post to assemble climber to, from site plan.

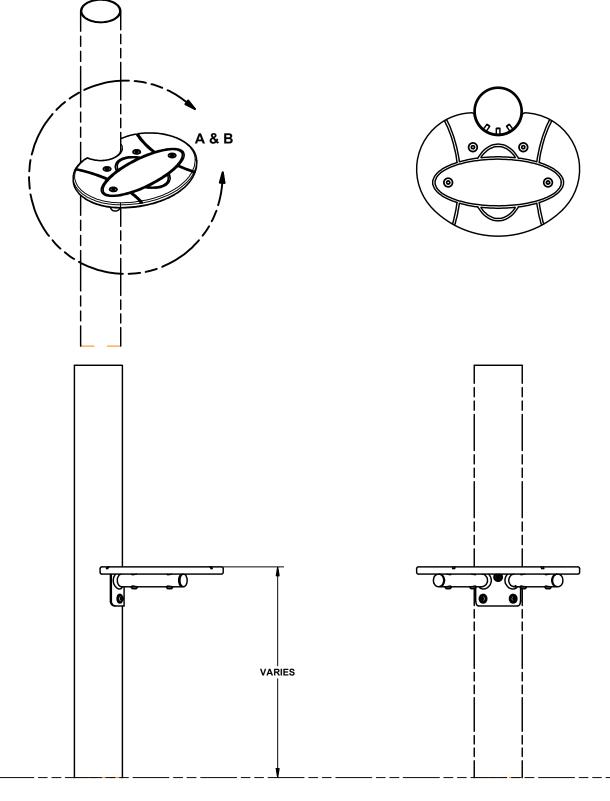
2. Attach climber to post using hardware specified in DETAIL A. Repeat for remaining climbers.

3. Tighten all hardware.

4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

370-0865 TREE BRANCH CLIMBER 72" REV: 00 PCN: 17-0217 11/7/2017

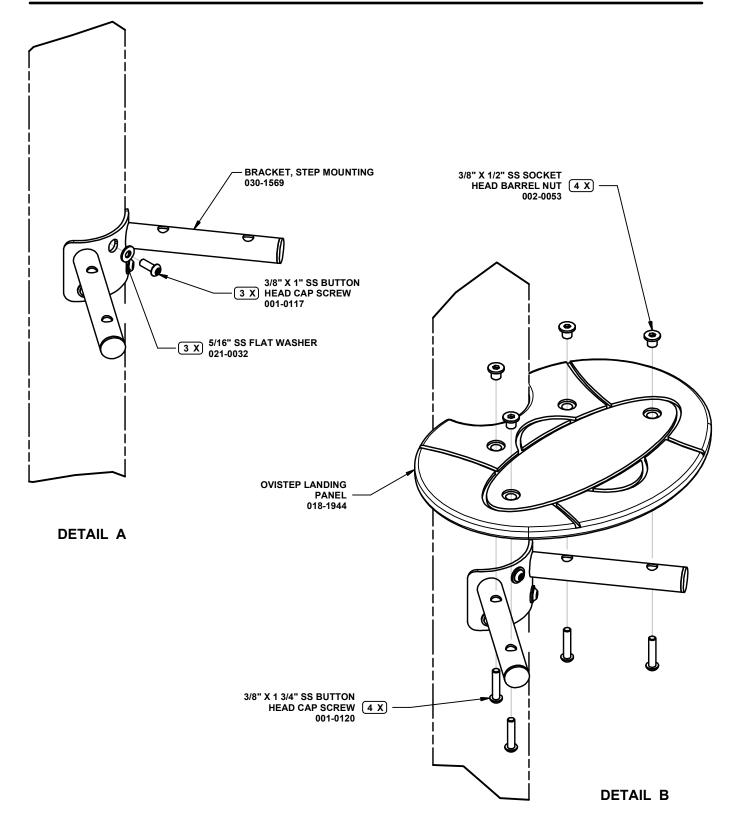




### 370-1608 OVISTEP LAUNCH PAD



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.

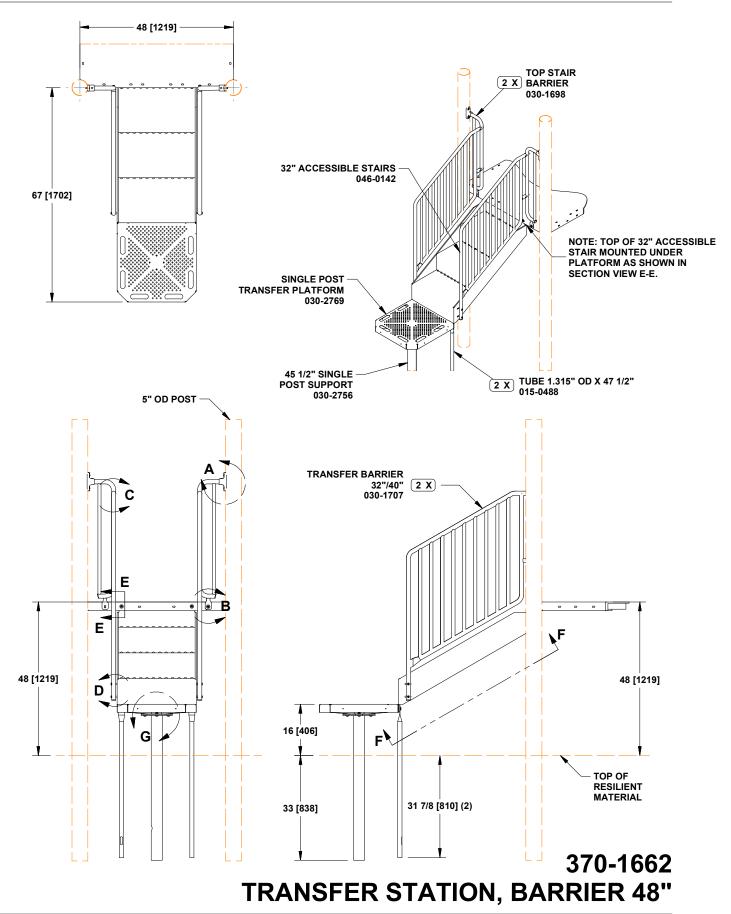


### 370-1608 OVISTEP LAUNCH PAD

PARTS LIST		SPECIFICATIONS
PART NO. DESCRIPTION	<u>QTY</u>	OVISTEP LANDING PANEL: 3/4" co-extruded HDPE.
018-1944       OVISTEP LANDING PANEL         030-1569       BRACKET, STEP MOUNTING         036-1305       HARDWARE PACKAGE         NOTE:       Hardware package(s) may include extra that is not necessary for this installation.	1 1 1	BRACKET, STEP MOUNTING: One piece all welded construction consisting of 10 GA galvanized sheet steel, 7 GA stainless steel sheet and 1.315" OD x 12 GA galvanized steel tubing. Finished with a baked on powder coating. HARDWARE PACKAGE: Stainless steel. SHIPPING WEIGHT: 9.55 LBS.
INS <sup>-</sup>	TALLATION	

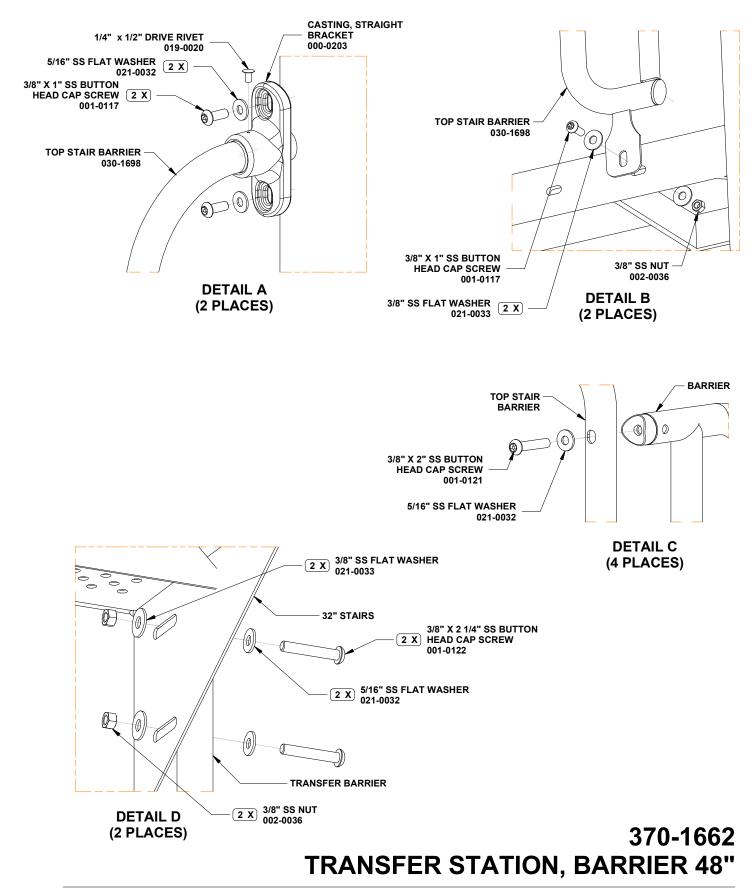
- 1. Attach STEP MOUNTING BRACKET to post using hardware specified in DETAIL A.
- 2. Attach OVISTEP LANDING PANEL to Step Mounting Bracket using hardware specified in DETAIL B.
- 3. Plumb and level component. Tighten all hardware.
- 4. INSTALL RESILIENT SURFACING MATERIAL IN ACCORDANCE TO INSTALLATION GUIDELINES.





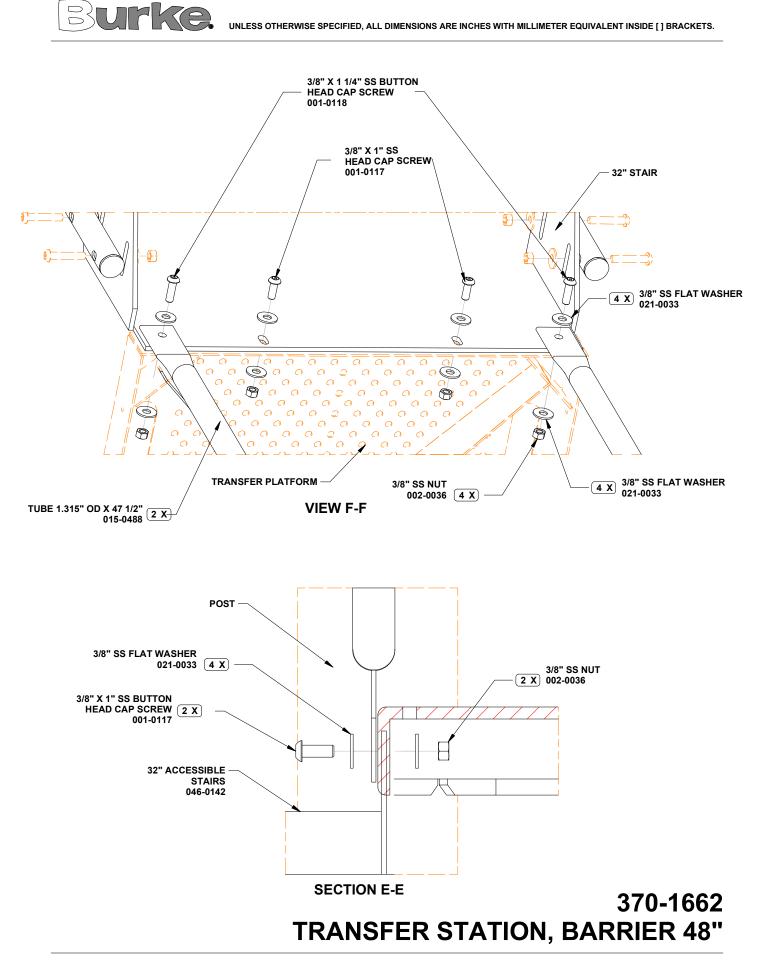






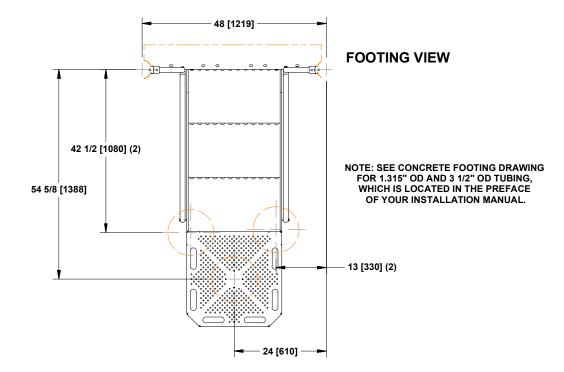
**BCI Burke Company, LLC** 

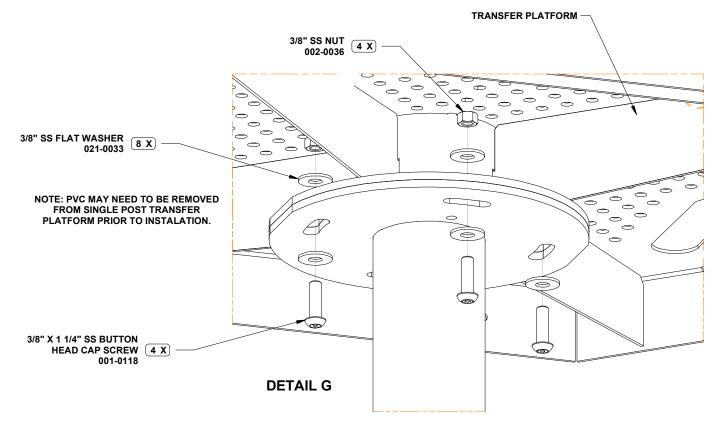
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### 370-1662 TRANSFER STATION, BARRIER 48"

PART NO.	DESCRIPTION	QTY	CA
000-0203	CASTING, STRAIGHT BRACKET	2	Fin
015-0488	TUBE 1.315" OD X 47 1/2"	2	<u>TU</u> finis
030-1698	TOP STAIR BARRIER	2	
030-1707	TRANSFER BARRIER, 32"/40"	2	<u>TO</u>
030-2756	45 1/2" SINGLE POST SUPORT	1	GA
030-2769	SINGLE TRANSFER PLATFORM	1	
036-0819	HARDWARE PACKAGE	1	cor
036-1509	HARDWARE PACKAGE	1	ste
046-0142	32" ACCESSIBLE STAIRS	1	45 cor mo
			cor and <u>HA</u>
			32" cor coa
	ardware package(s) may include extra han extra	ardware	Sł

#### **SPECIFICATIONS**

<u>CASTING, STRAIGHT BRACKET</u>: A356-T6 Aluminum, Heat- Treated. <sup>F</sup>inished with baked on powder coating.

TUBE 1.315" OD X 47 1/2": 1.315" OD x 12 GA galvanized steel tubing finished with a baked on powder coating.

<u>TOP STAIR BARRIER</u>: One piece all welded construction consisting of 1.315" OD x 12 GA & 1.029" OD x 12 GA galvanized steel tubing and 10 GA galvanized steel plate. Finished with a baked on powder coating.

TRANSFER BARRIER, 32"/40": One piece all welded construction consisting of 1.315" OD x 12 GA steel tubing, and 8 GA galvanized steel plate. Finished with a baked on powder coating.

45 1/2" SINGLE POST SUPPORT: One piece welded construction consisting of 3.5" OD X 11 Ga galvanized tubing and a 1/4" HRS mounting plate finished with a baked-on powder coat.

SINGLE POST TRANSFER PLATFORM: One piece welded construction consisting of 12 GA sheet steel, 1/4" HRS mounting plate and 4 1/2" X 11 Ga steel tubing finished with a PVC dipped coating.

HARDWARE PACKAGE: Stainless steel and aluminum rivets.

<u>32" ACCESSIBLE STAIRS</u>: One piece all welded construction consisting of 12 GA HRPO steel surfaces, sides, and gussets. PVC coated after fabrication.

SHIPPING WEIGHT: 272 LBS.

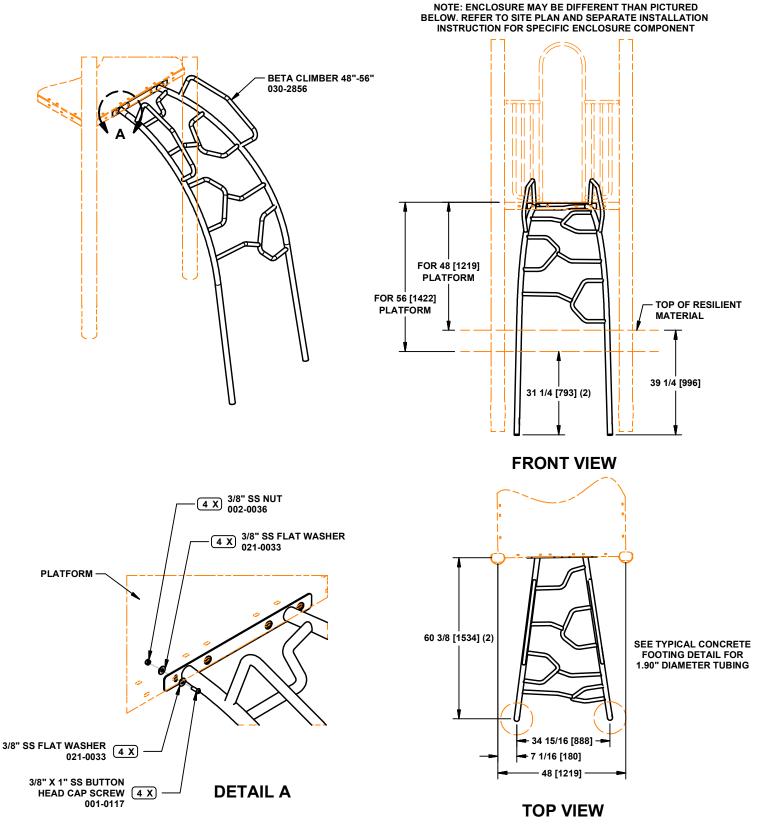
### INSTALLATION INSTRUCTIONS

### NOTE: Do not tighten hardware until instructed to do so. NOTE: PVC coating may need to be removed from mounting slots of platforms before installation.

- 1. Install PLATFORMS. See appropriate installation instructions.
- 2. Dig footing holes per dimensions shown. See typical concrete footing drawing for 1.315" OD and 3 1/2" OD tubing, which is located in the preface of your installation maual.
- 3. Attach 45 1/2" SINGLE POST SUPPORT to SINGLE POST TRANSFER PLATFORM using hardware specified in DETAIL G.
- 4. Attach both TUBE 1.315" OD x 47 1/2" and SINGLE POST TRANSFER PLATFORM to 32" ACCESSIBLE STAIRS using hardware specified in SECTION VIEW F-F.
- 5. Position 45 1/2" SINGLE POST SUPPORT and TUBE 1.315" OD X 47 1/2" into footing holes. See FOOTING VIEW.
- Attach 32" ACCESSIBLE STAIR to PLATFORM using hardware specifed in SECTION VIEW E-E. NOTE: The heads of the 3/8" x 1" SS BUTTON HEAD CAP SCREWS must be on the platform side of the 32" ACCESSIBLE STAIR.
- 7. Attach both TOP STAIR BARRIERS, and castings, to 5" OD POSTS using hardware specifed in DETAIL A and DETAIL B.
- 8. Attach TRANSFER BARRIERS, 32"/40" to 32" ACCESSIBLE STAIR using hardware specified in DETAIL D.
- 9. Attach TRANSFER BARRIERS, 32"/40" to TOP STAIR BARRIERS using hardware specifed in DETAIL C.
- 10. Tighten all hardware.
- 11. Block up, plumb and level assembly.
- 12. Pour concrete and allow concrete to set for 2-3 days.
- 13. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



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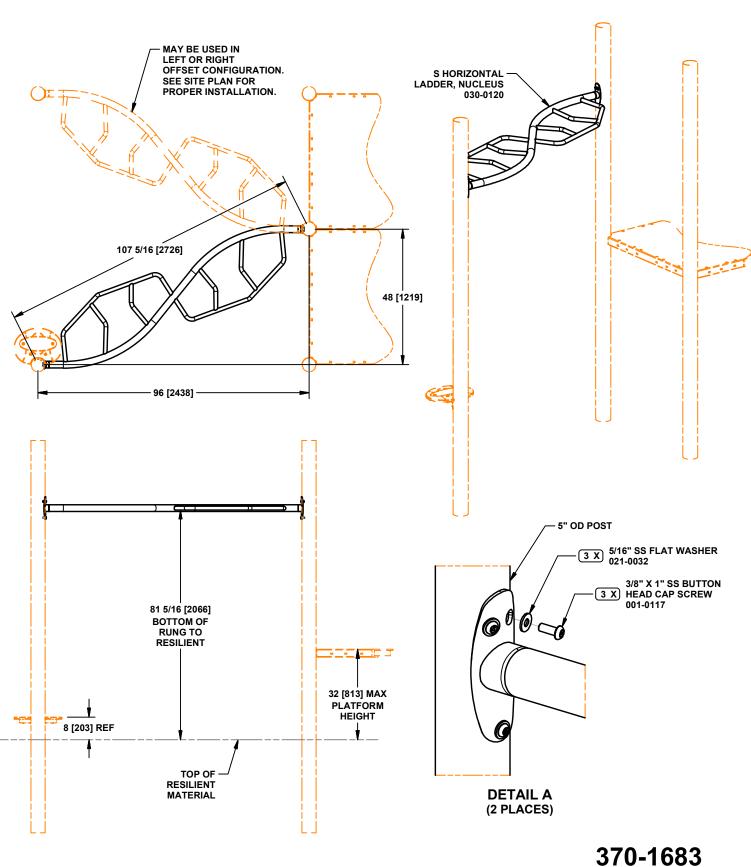
# 370-1681 BETA CLIMBER 48"-56"

P.O. Box 549 Fond du Lac, WI 54936-0549

	PARTS LIST		ſ	SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>		BETA CLIMBER, 48"-56": One piece welded construction
030-2856	BETA CLIMBER 48"-56"	1		consisting of 1.900" OD X 11 GA galvanized steel tubing, 1.315" OD X 12 GA galvanized steel tubing and a 8 GA galvanzed
036-0196	HARDWARE PACKAGE	1		steel plate finished with a baked-on powder coating.
	•			
				HARDWARE PACKAGE: Stainless Steel
	ardware package(s) may include necessary for this installation.	extra hardware		SHIPPING WEIGHT: 43 LBS.

1. Dig footing holes per dimensions shown in TOP VIEW. See typical concrete footing detail for 1.900" OD tubing, which is located in the preface of your installation manual.

- 2. Attach CLIMBER to platform using hardware specified in DETAIL A. Ensure the plate sits flush to the platform.
- 3. Tighten all hardware
- 4. Block up, level and plumb climber. Pour Concrete, let cure for 2-3 days.
- 5. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.

# S HORIZONTAL LADDER, NUCLEUS

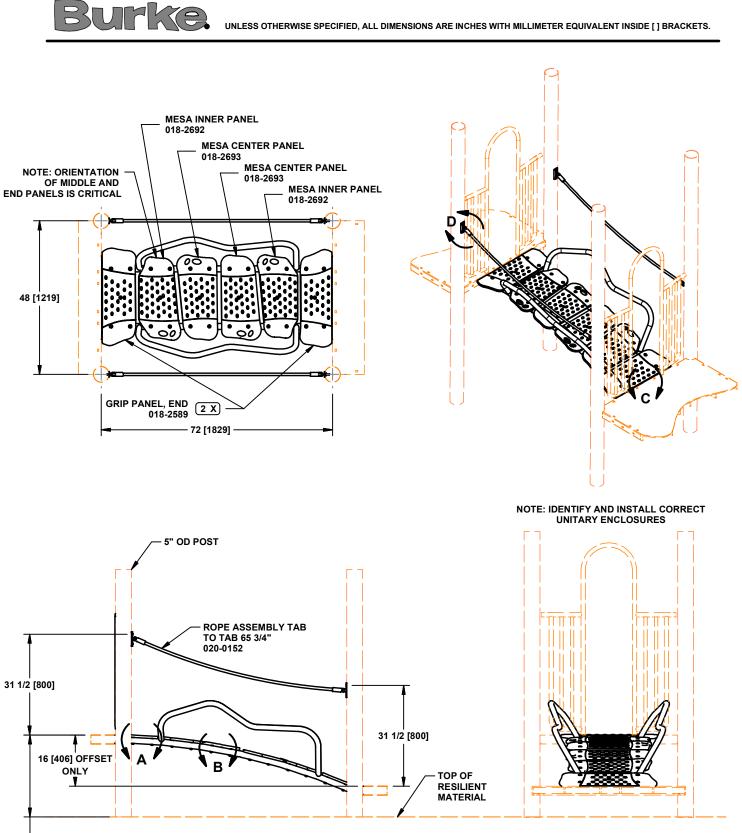
Burke.

PARTS LIST		SPECIFICATIONS
PART NO. DESCRIPTION	<u>QTY</u>	S HORIZONTAL LADDER, NUCLEUS: One piece all welded
030-0120 S HORIZONTAL LADDER, NUCLEUS	1	construction consisting of 2 3/8" OD x 10 GA, 2 3/8" OD x 12
036-0040 HARDWARE PACKAGE	2	GA, and 1.315" OD x 12 GA galvanized steel tubing, and 3/16" thick stainless steel plate. Finished with a baked on powder
		coating.
		HARDWARE PACKAGE: Stainless Steel.
		TARDWARE I AORAGE. Stainless Steel.
<b>NOTE:</b> Hardware package(s) may include extra ha that is not necessary for this installation.	aroware	SHIPPING WEIGHT: 55 LBS.
,		

#### LATION INSTRUCTIONS

NOTE: Do not tighten hardware until instructed to do so. NOTE: See site layout drawing for correct orientation.

- 1. Attach S HORIZONTAL LADDER, NUCLEUS to posts using hardware specified in DETAIL A.
- 2. Plumb posts and level component. Tighten all hardware.
- 3. Pour concrete and let set for 2 to 3 days.
- 4. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

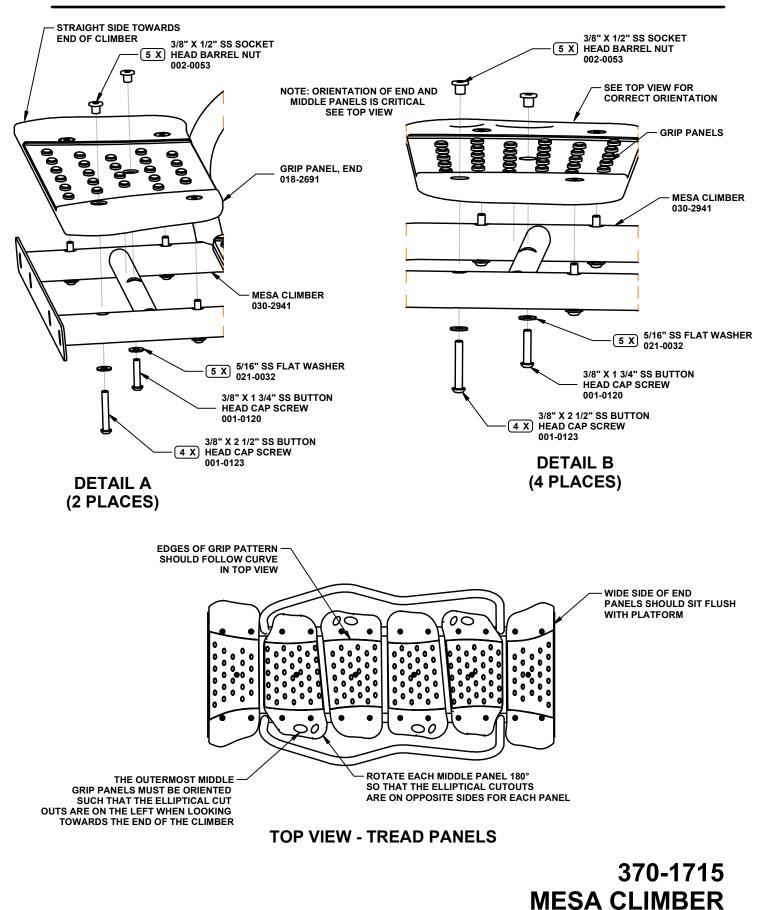


#### SEE SITE PLAN FOR PLATFORM HEIGHT

# 370-1715 MESA CLIMBER



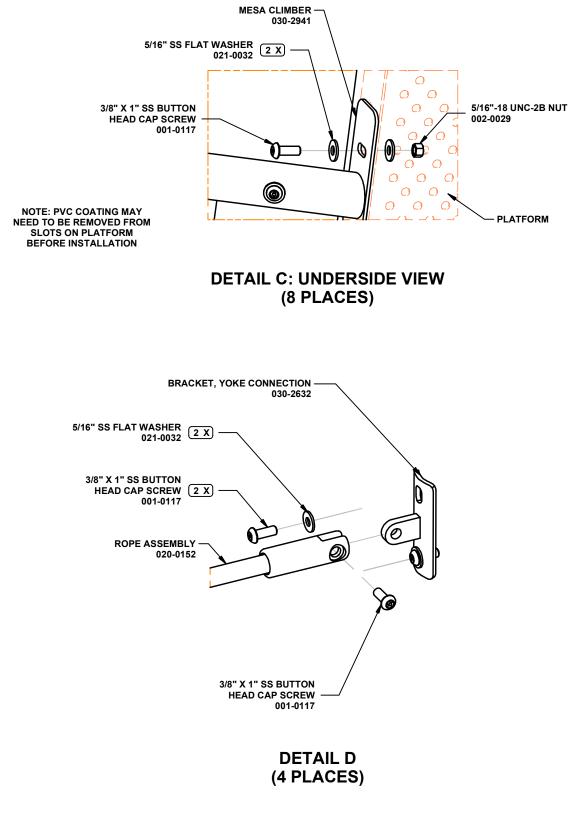
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.



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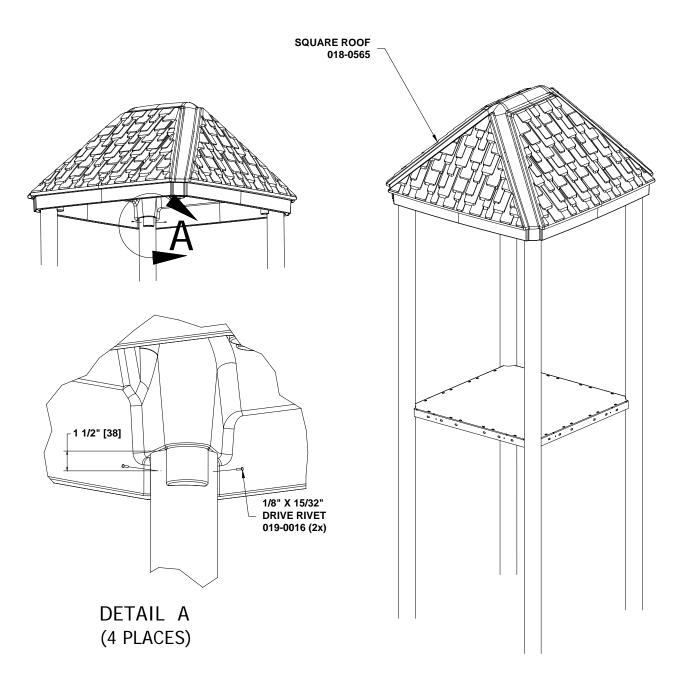


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	PARTS LIST		SPECIFICATIONS
PART NO.	-	<u>QTY</u>	MIDDLE AND END GRIP PANELS: Co-extruded HDPE
018-2589	GRIP PANEL, END	2	MESA CLIMBER: One piece all welded construction consisting
018-2692	MESA PANEL, INNER	2	of 1.900" X 11 GA galvanized steel tubing and 1.660" X 12 GA galvanized steel tubing finished with a baked-on powder
018-2693	MESA PANEL, CENTER	2	coating.
020-0152	ROPE ASSEMBLY, TAB TO TAB, 65 3/4"	2	ROPE ASSEMBLY: 20mm steel core rope and yoke 20mm
030-2632	BRACKET, YOKE CONNECTION	4	ferrule.
030-2941	MESA CLIMBER	1	
036-1560	HARDWARE PACKAGE	1	YOKE CONNECTION: One piece all welded construction consisting of 11 ga. steel and 7 ga. stainless steel formed plate
	•		with baked-on powder coating.
			HARDWARE PACKAGE: Stainless steel.
			TANDWANE FACINGE. Stainless steel.
NOTE: H	ardware package(s) may include extra har	dware	
	necessary for this installation.		SHIPPING WEIGHT: 143 LBS.
	INSTAL	LATIO	
NOTE: PVC	coating may need to be removed from mo	ountina ha	bles of parts before installation.
	ot tighten hardware until instructed to do		
	GRIP PANEL, END to the MESA CLIMBER		
			n the side closest to the platforms as shown in the TOP VIEW. MESA CLIMBER with hardware specified in DETAIL B.
	ire that the top panels are oriented as sho		-
	SA CLIMBER, 16" OFFSET to platforms usi		
NOTE: Plast	ic grip panels should be flush with platfo	rms, adjus	st if necessary.
		FION and Y	YOKE CONNECTION to posts using hardware specified in DETAIL D.
6. Tighten all			
/ . Install res	silient surfacing material in accordance	to install	tion guidelines, ASTM standards and CPSC guidelines.

370-1715 MESA CLIMBER REV: 01 PCN: 22-0487 7/27/2021





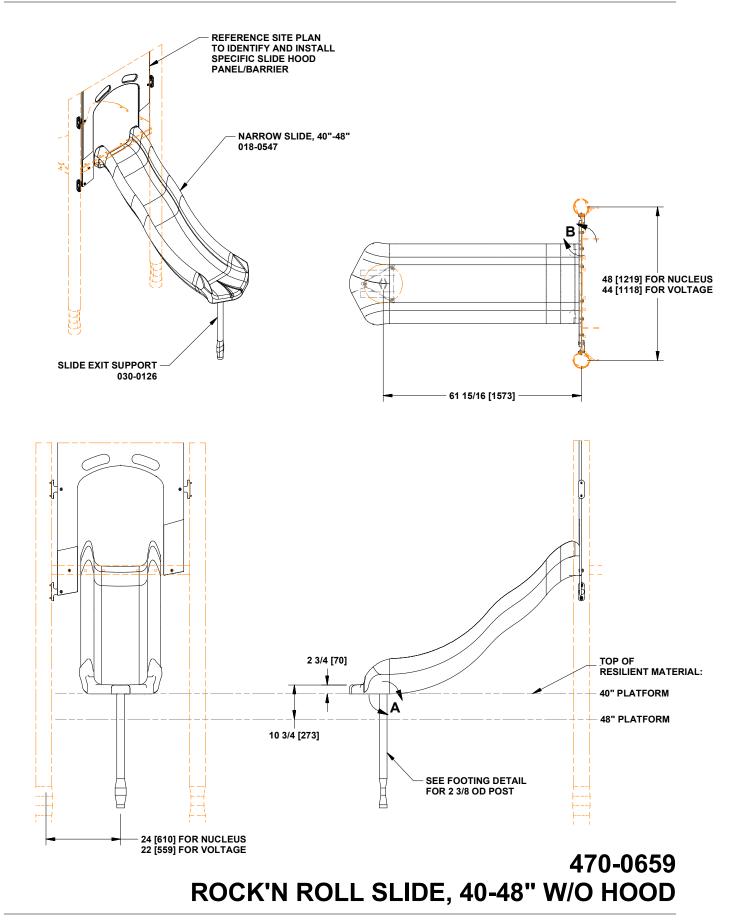


	PARTS LIST			SPECIFICATIONS
PART NO. 018-0565 036-1183	PARTS LIST <u>DESCRIPTION</u> SHAKER SQUARE ROOF HARDWARE PACKAGE	<u>QTY</u> 1 1	ro W <u>H</u>	SPECIFICATIONS SHAKER SQUARE ROOF: 3/16" thick, linear, low density, otationally molded, U.V. stabilized polyethylene with double wall construction. <u>HARDWARE PACKAGE</u> : Aluminum rivets with stainless steel bins.
Note: Hard\ that is not n	ware package(s) may include extra necessary for this installation.	a hardware		SHIPPING WEIGHT: 123 LBS.

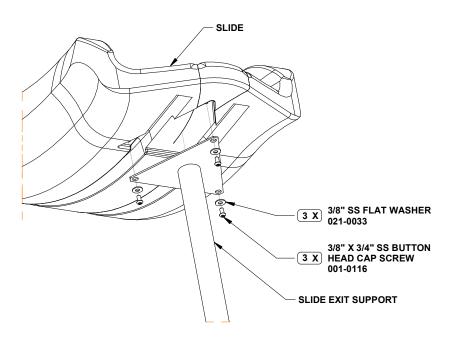
- 1. Determine location of roof to be installed from the site plan, which is located in the preface of your installation manual.
- 2. Insert roof on top of the 5" OD posts, making sure the plastic stubs insert and seat completely inside the post ID.
- 3. Drill (2) 1/8" diameter holes through the post and the roof stub inside the post. These holes should be approximately 1 1/2" down from the top edge of the post. Repeat for each post. See detail A.
- 4. Insert the 1/8" diameter drive rivets, and pound with a hammer to expand and seat the rivets. See detail A.
- 5. Spray drive rivet locations with touch-up paint.
- 6. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



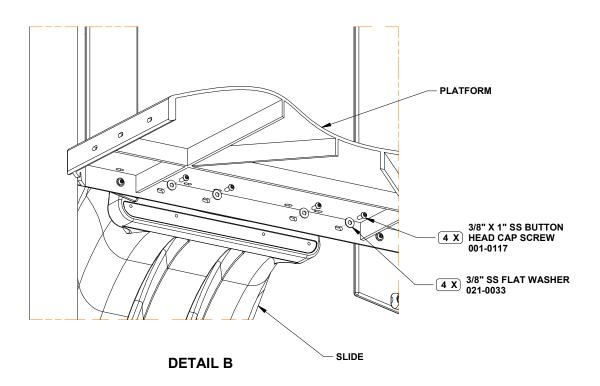
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.







**DETAIL A** 



### 470-0659 ROCK'N ROLL SLIDE, 40-48" W/O HOOD

	PARTS LIST		SPECIFICATIONS
PART NO. 018-0547 030-0126 036-1393	DESCRIPTION NARROW SLIDE, 40"-48" SUPPORT, SLIDE EXIT HARDWARE PACKAGE	QTY 1 1 1	SPECIFICATIONS           NARROW SLIDE, 40"-48"; SLIDE HOOD, NARROW SLIDES: 1/4"           thick, linear, low density, rotationally molded, U.V. stabilized           polyethylene with double wall construction, molded in 3/8" T-nut inserts,           and a textured surface.           SUPPORT, SLIDE EXIT: One piece all welded construction consisting           of 2 3/8" OD x 12 GA galvanized steel tubing and 8 GA galvanized           sheet steel. Finished with a baked on powder coating.           HARDWARE PACKAGE: Stainelss steel.
	ardware package(s) may include extra ha necessary for this installation.	iuware	SHIPPING WEIGHT: 71 LBS.

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

1. After platform and slide hood panel/barrier have been installed, locate and dig footing hole as per dimensions shown. See footing detail drawing, which is located in the preface of your installation manual.

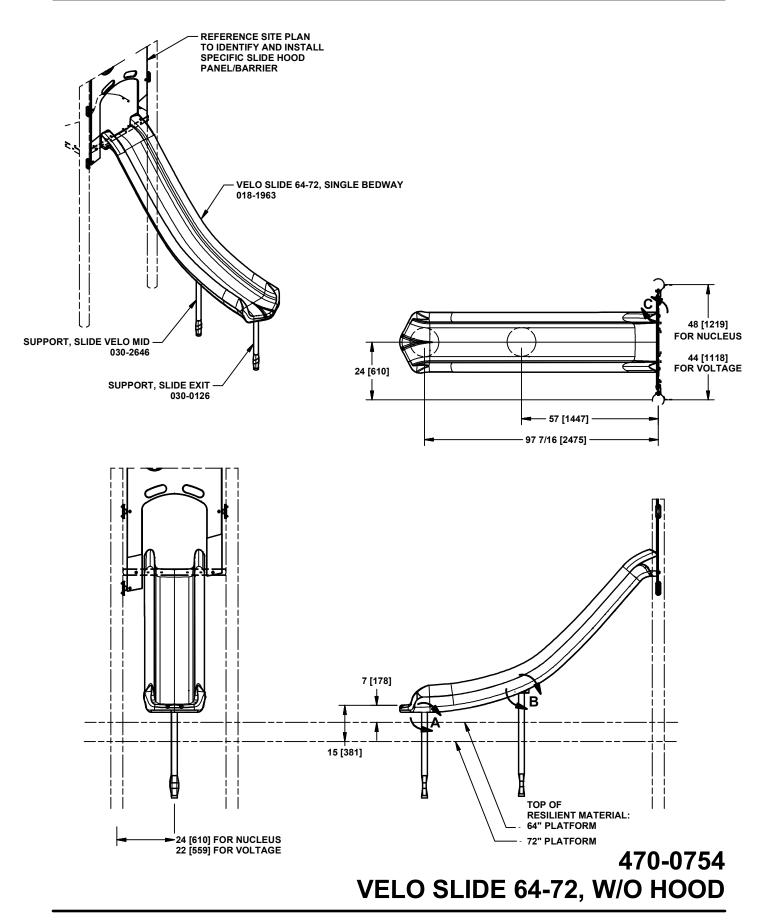
2. Attach SLIDE EXIT SUPPORT to NARROW SLIDE using hardware specified in DETAIL A. Tighten fasteners.

3. Position slide into footing holes. Attach slide to platform using hardware specified in DETAIL B. Make sure that the slide is flush and tight to platform.

- 4. Tighten all hardware.
- 5. Block-up, level and plumb.
- 6. Pour concrete. Let set for two to three days.

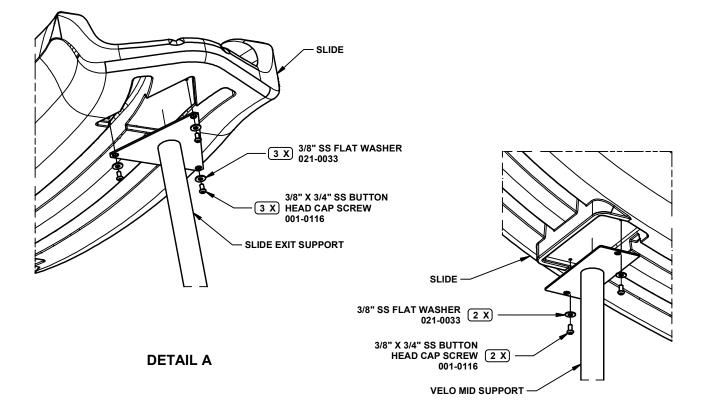
7. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



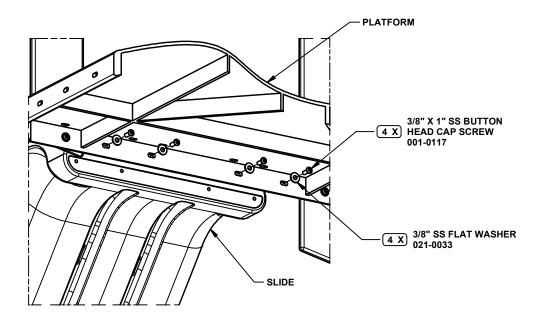


P.O. Box 549 Fond du Lac, WI 54936-0549





DETAIL B



**DETAIL C** 

# 470-0754 VELO SLIDE 64-72, W/O HOOD

PARTS LIST		SPECIFICATIONS
PART NO. DESCRIPTION	<u>QTY</u>	VELO SLIDE 64-72, SINGLE BEDWAY: 1/4" thick, linear, low density,
018-1963 VELO SLIDE 64-72, SINGLE BEDWAY	1	rotationally molded, U.V. stabilized polyethylene with double wall construction, molded in 3/8" T-nut inserts, and a textured surface.
030-0126 SUPPORT, SLIDE EXIT	1	
030-2646 SUPPORT, SLIDE VELO MID	1	<u>SUPPORT, SLIDE EXIT</u> : One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and 8 GA galvanized
036-1393 HARDWARE PACKAGE	1	sheet steel. Finished with a baked on powder coating.
		SUPPORT, SLIDE VELO MID: One piece all welded construction consisting of 10 GA galvanized steel plate and 2 3/8" OD x 12 GA galvanized steel tubing. Finished with a baked on powder coating. HARDWARE PACKAGE: Stainless steel.
<b><u>NOTE</u></b> : Hardware package(s) may include extra hard that is not necessary for this installation.	ware	SHIPPING WEIGHT: 109 LBS.

NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

1. After platform and slide hood panel/barrier have been installed, locate and dig footing hole as per dimensions shown. See footing detail drawing, which is located in the preface of your installation manual.

2. Attach SLIDE EXIT SUPPORT to VELO SLIDE using hardware specified in DETAIL A. Tighten fasteners.

3. Attach SLIDE VELO MID SUPPORT to slide using hardware specified in DETAIL B. Tighten fasteners.

4. Position slide into footing holes. Attach slide to platform using hardware specified in DETAIL C. Make sure that the slide is flush and tight to platform.

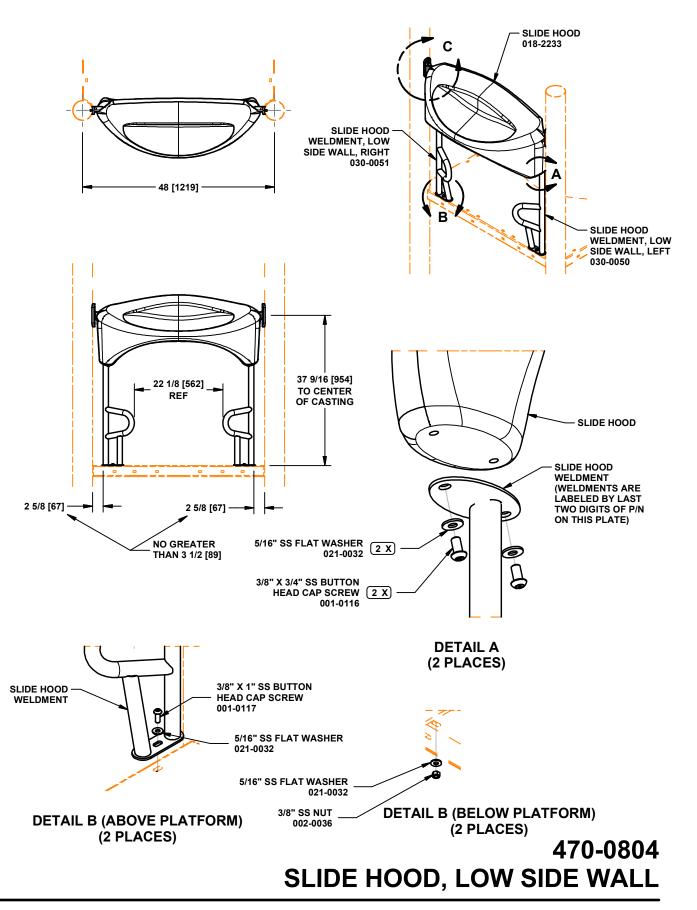
5. Tighten all hardware.

6. Block-up, level and plumb.

7. Pour concrete. Let set for two to three days.

8. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

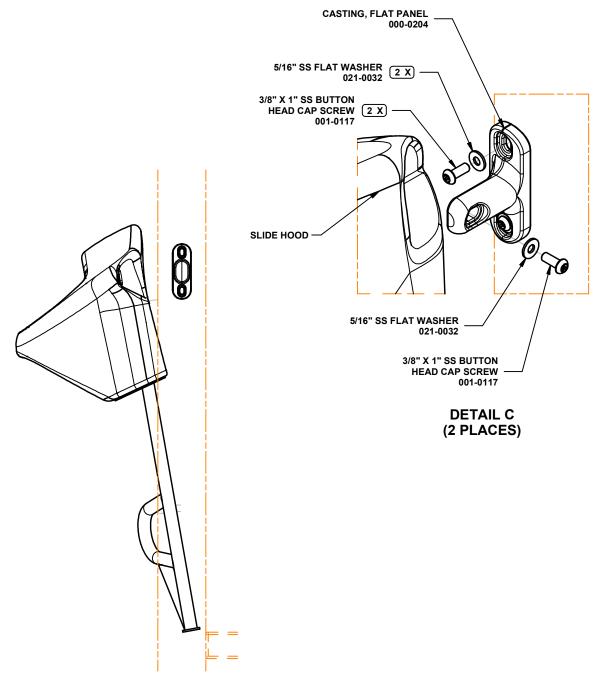




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SIDE VIEW

### 470-0804 SLIDE HOOD, LOW SIDE WALL

	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated. Finished with bat
000-0204	CASTING, FLAT PANEL	2	on powder coating.
018-2233	SLIDE HOOD	1	<u>SLIDE HOOD</u> : Linear, low density rotationally molded, U.V. stabilized, polyethylene, .250" thick, double wall construction. Textured outside surface.
030-0050	SLIDE HOOD WELDMENT, LOW SIDE WALL, LEFT	1	SLIDE HOOD WELDMENT, LOW SIDE WALL, LEFT; SLIDE HOOD WELDME LOW SIDE WALL, RIGHT: One piece all welded construction consisting of 1.31
030-0051	SLIDE HOOD WELDMENT, LOW SIDE WALL, RIGHT	1	OD x 12 GA galvanized steel tubing and 8 GA and 10 GA galvanized steel sheeting. Finished with a baked on powder coating. HARDWARE PACKAGE; HARDWARE PACKAGE; HARDWARE PACKAGE:
036-0040	HARDWARE PACKAGE	2	Stainless steel.
036-0784	HARDWARE PACKAGE	1	
036-2006	HARDWARE PACKAGE	1	
	ardware package(s) may include extra hard necessary for this installation.	lware	SHIPPING WEIGHT: 31 LBS.

NOTE: Do not tighten hardware until instructed to do so.

1. Attach SLIDE HOOD WELDMENT, LOW SIDE WALL, LEFT and SLIDE HOOD WELDMENT, LOW SIDE WALL, RIGHT to SLIDE HOOD using hardware specified in DETAIL A. Tighten hardware.

2. Loosely fasten slide hood weldment to platform using hardware specified in DETAIL B.

3. Tilt the hood assembly out of the way and attach CASTING, FLAT PANEL using hardware in DETAIL C.

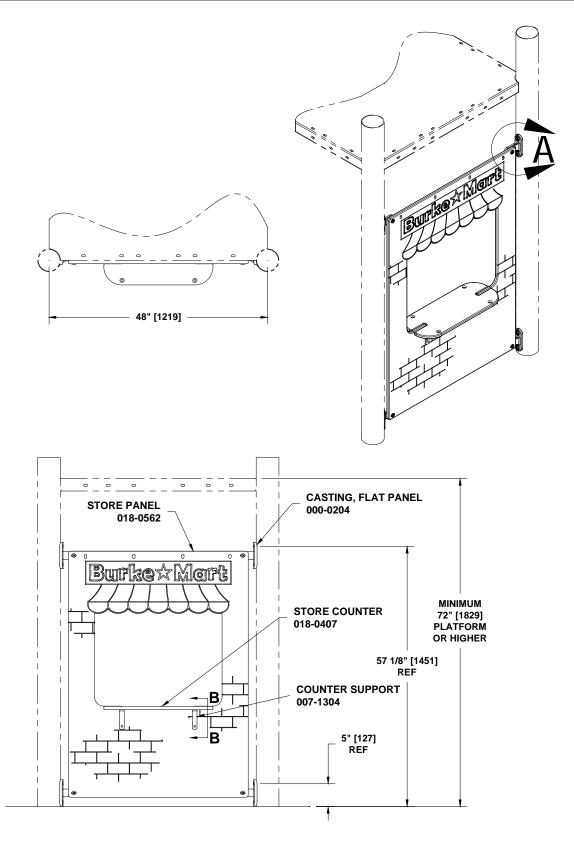
4. Tilt the hood assembly into position, against the castings, and align the slot of the casting and the nut insert of the slide hood.

Hold the casting in position, move the hood out of the way, and then tighten hardware connecting the casting to the post.

5. Attach the slide hood assembly to the castings using the remaining hardware in DETAIL C.

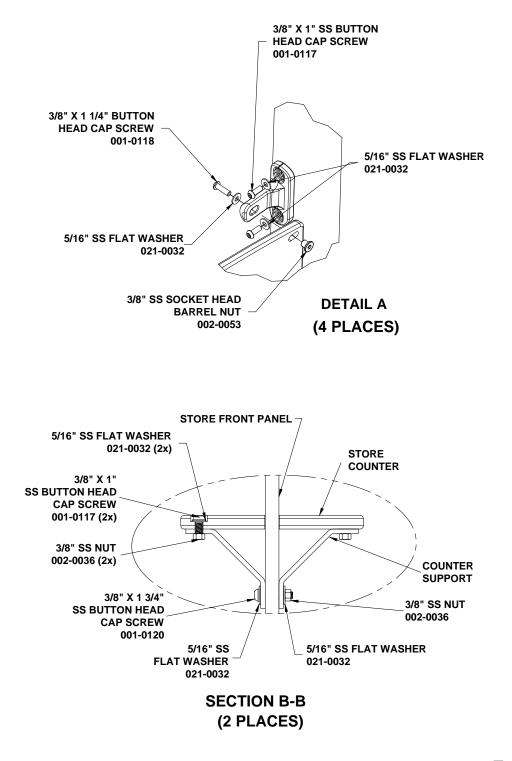
6. Tighten all hardware.





### 570-0620 BURKE MART PANEL BELOW PLATFORM 72"-112"

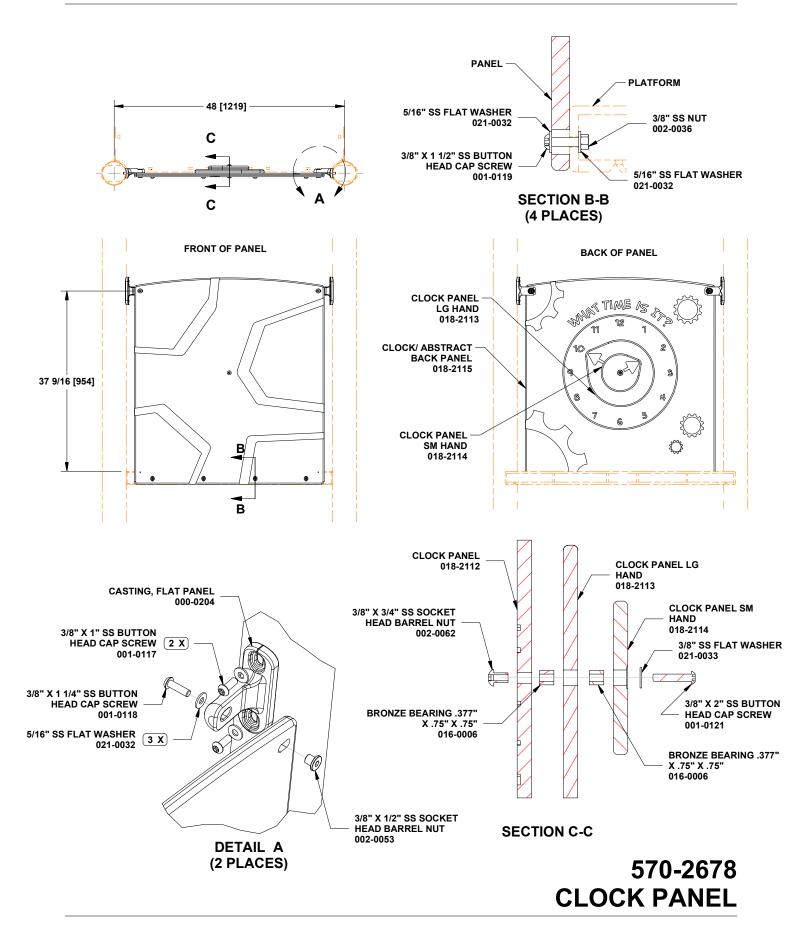




570-0620 BURKE MART PANEL BELOW PLATFORM 72"-112"

PART NO. 000-0204 007-1304 018-0407 018-0562 036-1245	PARTS LIST <u>DESCRIPTION</u> CASTING, FLAT PANEL COUNTER SUPPORT STORE COUNTER BURKE MART PANEL HARDWARE PACKAGE	<u>QTY</u> 4 1 1	SPECIFICATIONS         CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.         Finished with baked on powder coating.         COUNTER SUPPORT: Formed 8 GA. galvanized sheet steel         finished with a baked on powder coating.         STORE COUNTER: 3/4" extruded HDPE.         BURKE MART PANEL: 3/4" co-extruded HDPE.         HARDWARE PACKAGE: Stainless steel
Note: Hard that is not r	ware package(s) may include extra have extra h	ardware	SHIPPING WEIGHT: 54 I BS
Note: Hardy that is not r	ware package(s) may include extra hate extra	ardware	SHIPPING WEIGHT: 54 LBS.
Note: Hardy that is not r	necessary for this installation.		SHIPPING WEIGHT: 54 LBS.
Note: Hardy that is not r	necessary for this installation.		
that is not r	necessary for this installation.	FALLATION I	
that is not r NOTE: Do n 1. Attach a	INS	TALLATION I d to do so. osts using 3/8" x 1	I" SS button head cap screws and 5/16" SS flat washers. <b>NOTE:</b>
NOTE: Do n 1. Attach a flat pan 2. Attach S	INS INS Not tighten hardware until instructe all four CASTINGS FLAT PANEL to p rel casting must be positioned so in	TALLATION I d to do so. osts using 3/8" x 1 t is offset towards	I" SS button head cap screws and 5/16" SS flat washers. <b>NOTE:</b>
<ul> <li>that is not r</li> <li>NOTE: Do n</li> <li>1. Attach a flat pan</li> <li>2. Attach S socket h</li> <li>3. Attach C nuts. Se</li> <li>4. Slide ST counter</li> </ul>	INS not tighten hardware until instructe all four CASTINGS FLAT PANEL to p nel casting must be positioned so it STORE PANEL to flat panel castings nead barrel nuts. See DETAIL A. COUNTER SUPPORTS to store panel se SECTION B-B. FORE COUNTER into slot on store from using 3/8" x 1" SS button head cap s	TALLATION I d to do so. osts using 3/8" x 1 t is offset toward using 3/8" x 1 1/4" el using 3/8" x 1 3/4 ont panel with cou crews, 5/16" flat w	I" SS button head cap screws and 5/16" SS flat washers. NOTE: s platform. See DETAIL A.



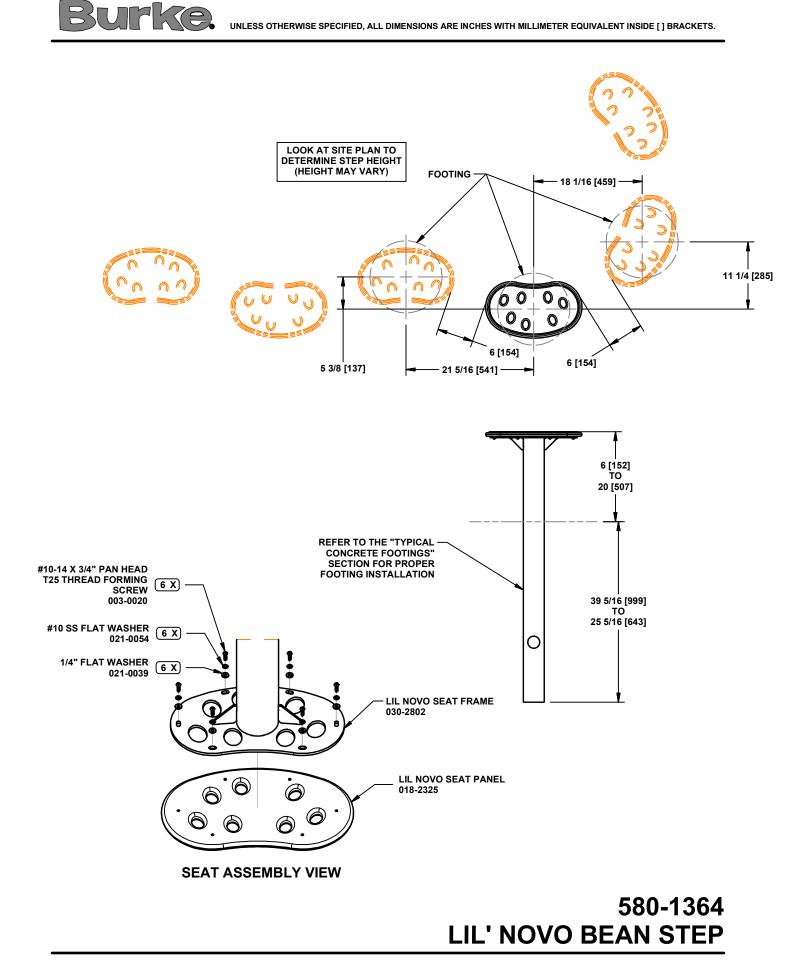


	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	QTY	CASTING, FLAT PANEL: A356-T6 Aluminum, Heat-Treated.
000-0204	CASTING. FLAT PANEL	2	Finished with baked on powder coating.
016-0006	BRONZE BEARING .377" X .75" X .75"	2	
018-2113	CLOCK PANEL LG HAND	1	BRONZE BEARING .377" X .75" X .75": Oil impregnated, bronze.
018-2114	CLOCK PANEL SM HAND	1	
018-2115	CLOCK/ ABSTRACT BACK	1	CLOCK PANEL LG HAND; CLOCK PANEL SM HAND;
036-0844	HARDWARE PACKAGE	1	CLOCK/ ABSTRACT BACK PANEL: 3/4" co-extruded HDPE.
036-0880	HARDWARE PACKAGE	1	HARDWARE PACKAGE; HARDWARE PACKAGE;
036-1230	HARDWARE PACKAGE	1	HARDWARE PACKAGE; HARDWARE PACKAGE:
036-2022	HARDWARE PACKAGE	1	Stainless steel.
NOTE: Ha	ardware package(s) may include extra hard	dware	
	necessary for this installation.		SHIPPING WEIGHT: 49 LBS.

NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of Panel assembly.
- 2. Attach FLAT PANEL CASTINGS to posts using 3/8" X 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- Attach PANEL to platform using 3/8" X 1 1/2" SS button head cap screws, 5/16" SS flat washers and 3/8" SS nuts. See SECTION B-B.
- 4. Attach CLOCK PANEL SM HAND and CLOCK PANEL LG HAND to CLOCK PANEL using BRONZE BEARING .377" X .75" X .75", 3/8" X 3/4" SS socket head barrel nut, 3/8" X 2" SS button head cap screw, and 3/8" SS flat washer. See SECTION C-C.
- 5. Level panel assembly and tighten all hardware, make sure wheel spins freely.
- 6. Install resilient material accordance to installation guidelines, ASTM standards and CPSC guidlines.



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Telephone 920-921-9220

	PARTS LIST =		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	LIL NOVO SEAT PANEL: 3/4" Co-Extruded HDPE
018-2325	LIL NOVO SEAT PANEL	1	LIL NOVO SEAT FRAME: One piece all welded construction
030-2802	LIL NOVO SEAT FRAME	1	consisting of 3.5" OD x 11 GA galvanized tubing, 8 GA
036-2008	HARDWARE PACKAGE	2	galvanized steel sheeting, and 1/4" zinc-chromated HR steel sheeting. Finished with a baked on powder coating.
			HARDWARE PACKAGE: Stainless Steel and Zinc-Plated Steel.
<u>NOTE:</u> Ha that is not	ardware package(s) may include necessary for this installation.	extra hardware	SHIPPING WEIGHT: 27 LBS.

#### NOTE: Do not over-tighten hardware.

1. Locate and dig footing hole per dimensions given and site plan. See typical concrete footing details, which are located in the preface of this installation manual.

- 2. Attach the LIL NOVO SEAT PANEL to the LIL NOVO SEAT FRAME using hardware as specified in SEAT ASSEMBLY VIEW.
- 3. Place assembly into footing hole. Block-up, plumb, and level seat.
- 4. Pour concrete. Allow concrete to set for 2-3 days.

5. If installed in a play area within the use zone of play equipment, then install resilient material in accordance to installation guidelines, ASTM standards, and CPSC guidelines.



Order Number
Job Name
Structure Number

### **GENERAL CONFORMITY CERTIFICATION**

As required by the Consumer Product Safety Improvement Act of 2008, Public Law 110-314 122 Stat. 3016 (August 14, 2008) H.R. 4040

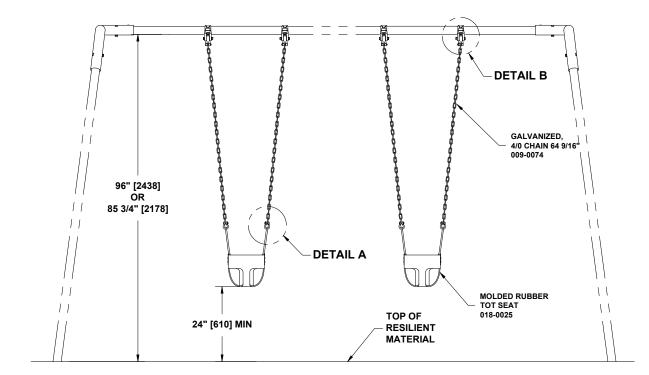
- 1. This Certification of Compliance covers the playground components sold on Order #\_\_\_\_, identified as Proposal #\_\_\_\_.
- 2. This Certification of Compliance certifies that the products identified in item 1 comply with all rules, bans, standards or regulations applicable to the product under the Consumer Product Safety Improvement Act of 2008; Sections 101, 102, 103 and 108.
- 3. Manufacturer certifying compliance of the products:

BCI Burke Company, LLC 660 Van Dyne Road Fond du Lac, WI 54935 (920) 921-9220

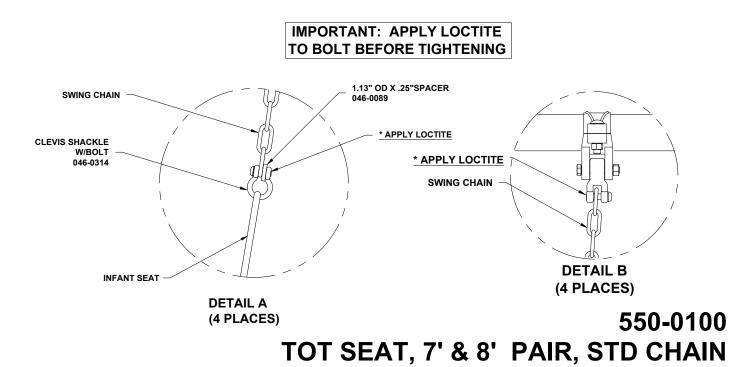
4. The contact information for the individual maintaining records of the test results is as follows: Wayne Orvold

BCI Burke Company, LLC 660 Van Dyne Road Fond du lac, WI 54935 (920) 921-9220 Worvold@bciburke.com

- 5. These products were manufactured for shipment on \_\_\_\_\_.
- 6. This General Conformity Certification and certification of compliance is based on testing completed through a reasonable testing program (ISO WI 028-08) maintained at the manufacturer listed above.
- The testing for this certificate was completed at: Applied Technical Services, Incorporated 1049 Triad Coart Marietta, GA 30062 (770) 423-1400

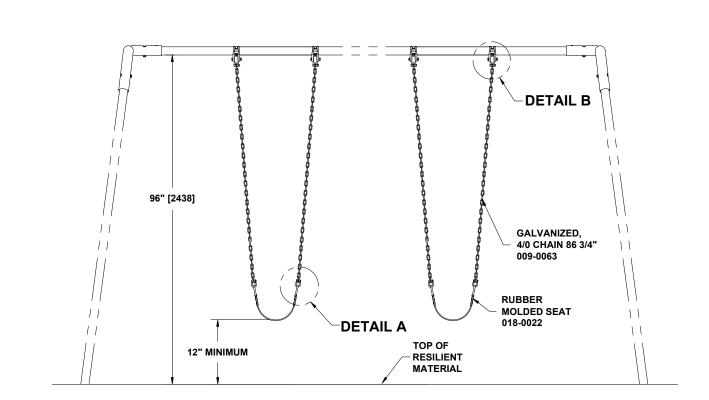


SWING SEAT HEIGHT REQUIREMENTS CUT CHAIN OFF THE TOP, TO ATTAIN 24" MINIMUM SEAT HEIGHT, MAKE SURE TO CUT EQUAL AMOUNTS OFF BOTH CHAINS.

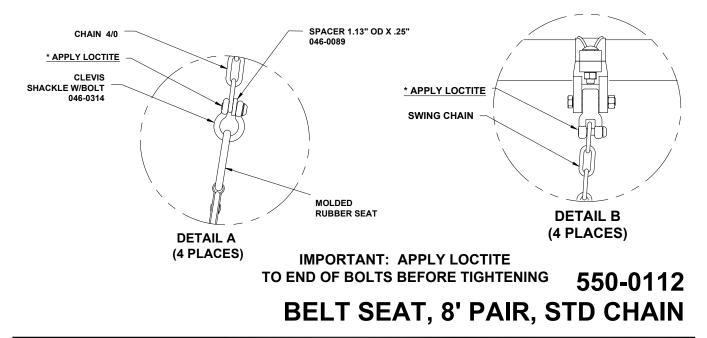


	PARTS LIST		SPECIFICATIONS
PART NO. 009-0074 018-0025 046-0089 046-2197 046-0314	PARTS LIST DESCRIPTION GALVANIZED, 4/0 CHAIN 64 9/16" MOLDED RUBBER TOT SEAT SPACER 1.13" OD X .25" LOCTITE CLEVIS SHACKLE W/BOLT	QTY 4 2 4 1 4	<ul> <li><u>GALVANIZED, 4/0 CHAIN 64 9/16"</u>: 3/8" diameter, 4/0 straight coil chain.</li> <li><u>MOLDED RUBBER TOT SEAT</u>: Molded rubber, reinforced with a steel insert. Riveted galvanized attachment hardware.</li> <li><u>SPACER 1.13" OD X .25"</u>: 1/4" Nylatron GS.</li> <li><u>LOCTITE</u>: Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and</li> </ul>
Note: Hardw	vare package(s) may include extra hardv	vare	cumene hydroperoxide. <u>CLEVIS SHACKLE W/BOLT</u> : 5/16" Shackle with a 3/8" X 1 1/2" bolt.
	ecessary for this installation.	Varo	SHIPPING WEIGHT: 24 LBS.

- Unscrew bolt on swing hanger and attach swing CHAIN 4/0 to swing hanger. Apply LOCTITE to all bolts on hangers before tightening. See DETAIL B.
- 2. Unscrew bolt in CLEVIS SHACKLE and slide shackles onto both sides of MOLDED RUBBER SEAT. See DETAIL A.
- 3. Determine what length to cut the chains. Attach the seat to the chains with SPACER and shackle at your desired height. Note there must be a minimum of 24" between the underside of the seat and the top of the resilient material.
- 4. With the seats at the desired heights and also attaining the 24" minimum clearance, cut and remove the excess chain. Make sure to cut the same length off each chain so that the seat remains level. Apply loctite to all shackle bolts and tighten.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

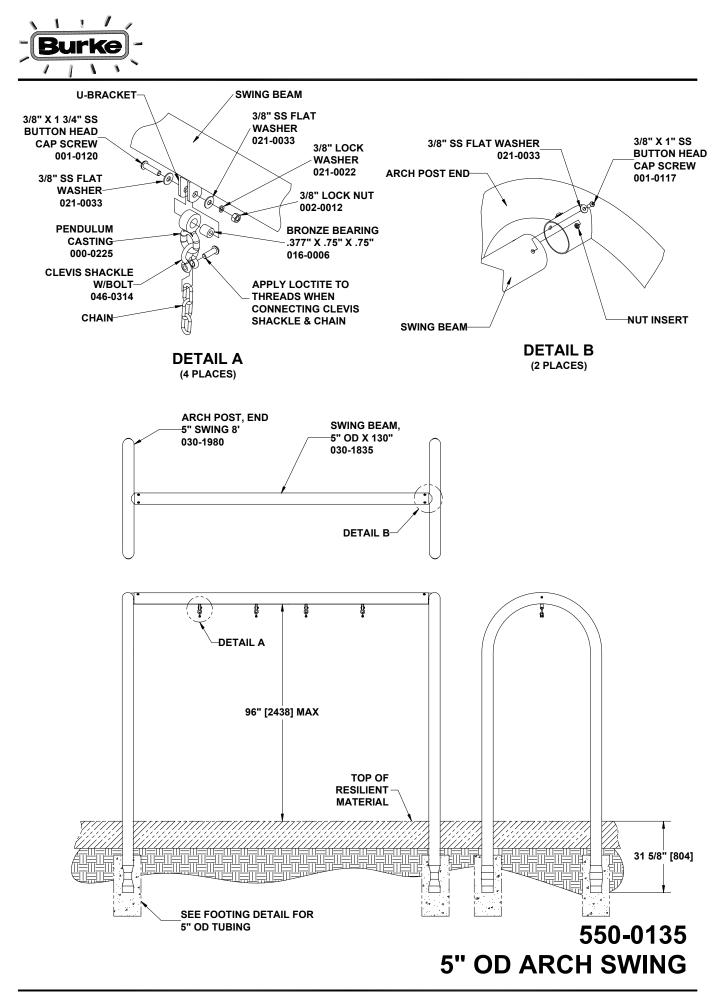


#### SWING SEAT HEIGHT REQUIREMENTS CUT CHAIN OFF THE TOP, TO ATTAIN 12" MINIMUM SEAT HEIGHT, MAKE SURE TO CUT EQUAL AMOUNTS OFF BOTH CHAINS.

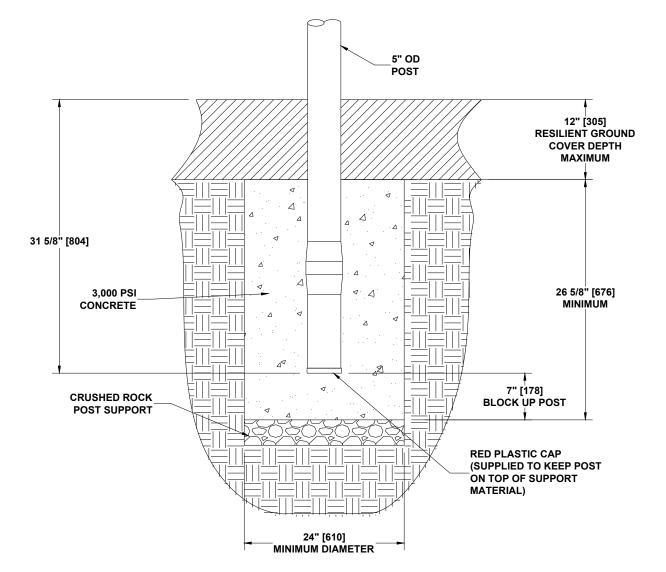


	PARTS LIST		SPECIFICATIONS
PART NO. 009-0063 018-0022 046-089 046-2197 046-0314	GALVANIZED 4/0 CHAIN 86 3/4" MOLDED RUBBER SEAT SPACER 1.13" OD X .25" LOCTITE CLEVIS SHACKLE W/BOLT	QTY 4 1 4	GALVANIZED 4/0 CHAIN 86 3/4": 3/8" diameter, 4/0 straight coil chain.         MOLDED RUBBER SEAT: Molded rubber, reinforced with a steel insert. Riveted galvanized attachment hardware.         SPACER 1.13" OD X .25": 1/4" Nylatron GS.         LOCTITE: Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and cumene hydroperoxide.         CLEVIS SHACKLE W/BOLT: 5/16" Shackle with a 3/8" X 1 1/2" bolt.
Note: Hardware package(s) may include extra hardware that is not necessary for this installation.		lware	SHIPPING WEIGHT: 20 LBS.

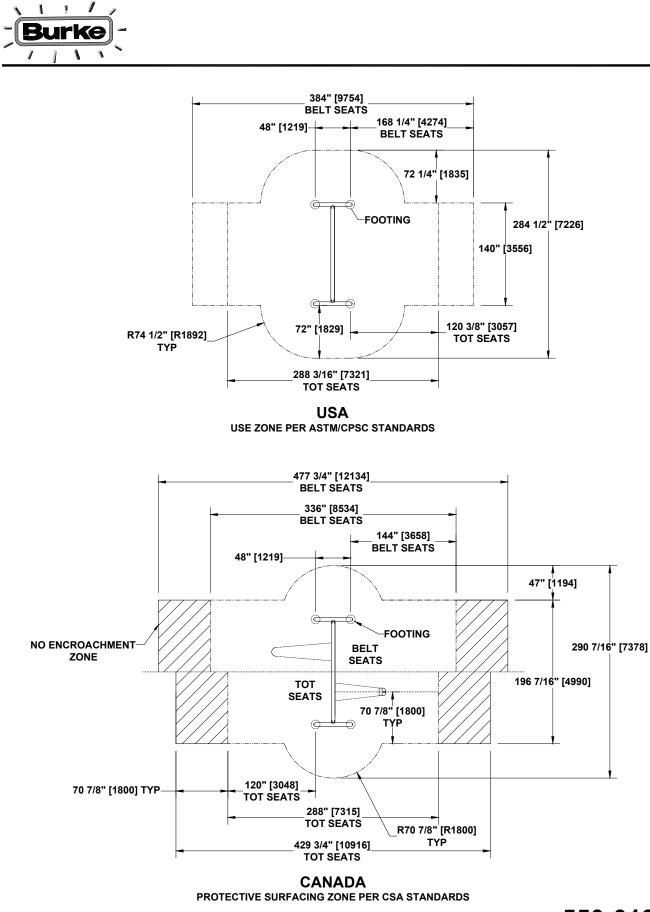
- 1. Unscrew bolt on swing hanger and attach swing CHAIN 4/0 to swing hanger. Apply LOCTITE to all bolts on hangers before tightening. See DETAIL B.
- 2. Unscrew bolt in CLEVIS SHACKLE and slide shackles onto both sides of MOLDED RUBBER SEAT. See DETAIL A.
- 3. Determine what length to cut the chains. Attach the seat to the chains with SPACER and shackle at your desired height. Note there must be a minimum of 12" below the seat between the underside of the seat and the top of the resilient material. When measuring, the seat must be pulled down as if someone were sitting in it and the resilient material must be at it's finished depth.
- 4. With the seats at the desired heights and also attaining the 12" minimum clearance, cut and remove the excess chain. Make sure to cut the same length off each chain so that the seat remains level. Apply loctite to all shackle bolts and tighten.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.







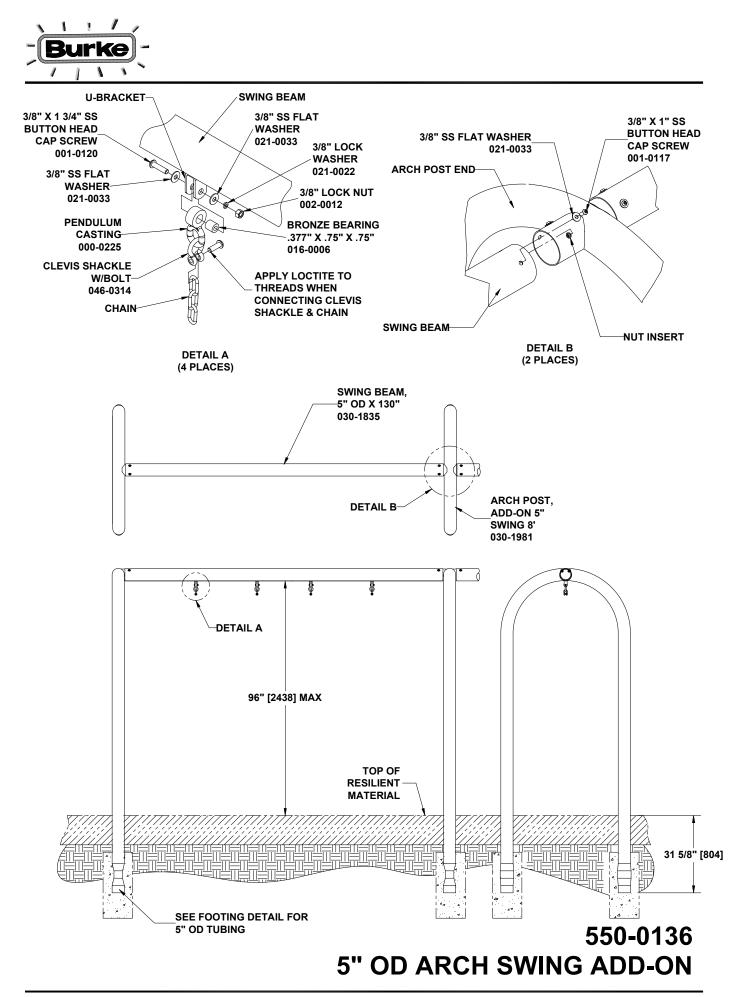
550-0135 5" OD ARCH SWING



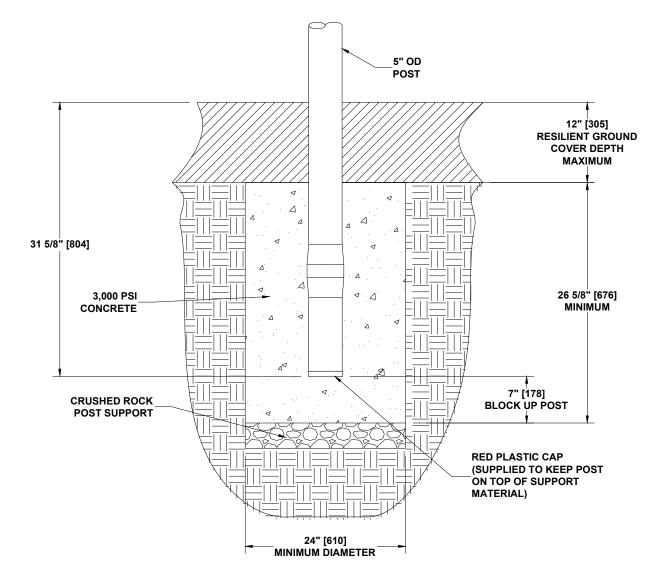
550-0135 5" OD ARCH SWING

	PARTS LIST		SPECIFICATIONS
PART NO. 000-0225 016-0006 030-1835 030-1980	PENDULUM CASTING BRONZE BEARING .377" X .75" X .75" SWING BEAM, 5" OD X 130" ARCH POST END, 5" OD SWING	QTY 4 4 1 2	<ul> <li><u>PENDULUM CASTING</u>: Galvanize plated, grade 32510, malleable iron</li> <li><u>BRONZE BEARING .377" X .75" X .75"</u>: Oil impregnated, bronze.</li> <li><u>SWING BEAM, 5" OD X 130"</u>: One piece all welded construction</li> </ul>
036-0227 036-0788 036-1414 046-2197	HARDWARE PACKAGE HARDWARE PACKAGE HARDWARE PACKAGE LOCTITE	1 2 1 1	consisting of 5" OD x 11 GA galvanized steel tubing and 8 GA galvanized steel plate. Finished with a baked on powder coating. <u>ARCH POST END, 5" OD SWING</u> : One piece all welded construction consisting of 5" OD x 11 GA & 11/16" OD low carbon steel bar and 4 1/2" OD x 11 GA steel tubing w/cadmium and yellow chromate plating, and an assembly of 3/8" nut inserts. Finished with a baked on powder coating.
			HARDWARE PACKAGE: Stainless steel. HARDWARE PACKAGE: 5/16" Shackle with a 3/8" X 1 5/32" bolt. HARDWARE PACKAGE: Stainless steel washers & screws and
			zinc plated steel lock nuts & washers. <u>LOCTITE</u> : Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate, polyglycol oleate propylene clycol, titanium dioxide, and cumene hydroperoxide.
Note: Hardware package(s) may include extra hardware that is not necessary for this installation.			SHIPPING WEIGHT: 367 LBS.

- 1. Determine 5" OD post locations per dimensions shown.
- 2. Dig footing holes. See typical concrete footing drawing for 5" OD posts, which is located in the preface of the installation manual.
- 3. Attach 5" OD x 130" SWING BEAM to both ARCH POST, END 5" OD SWING by sleeving the swing beam over arch post stub and fasten using 3/8" X 1" SS button head cap screws. Tighten hardware. See DETAIL B.
- 4. Position frame into footing holes. Block up, plumb, and level frame.
- 5. Pour concrete and allow it to set for 2 to 3 days.
- 6. Insert BRONZE BEARING .377" X .75" X .75" into PENDULUMS and attach to swing beam as shown in DETAIL A. Tighten hardware.
- 7. Attach swing chain to pendulum using CLEVIS SHACKLE W/ BOLT. Tighten hardware. See DETAIL A.
- 8. INSTALL RESILIENT SURFACING MATERIAL.

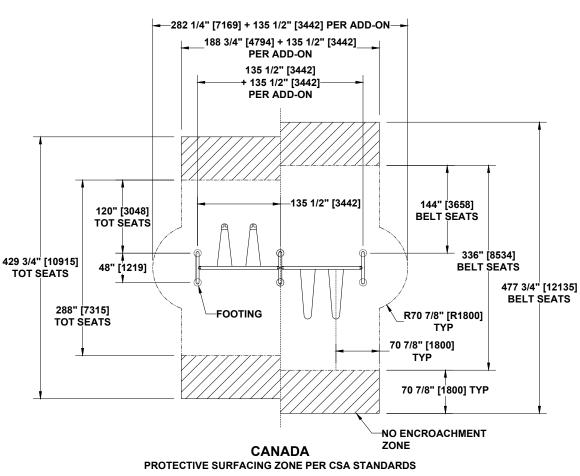




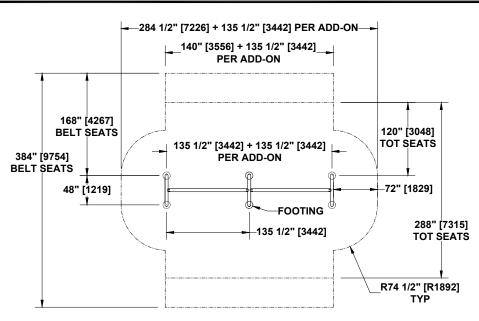


550-0136 5" OD ARCH SWING ADD-ON

### 550-0136 5" OD ARCH SWING ADD-ON









DADTNO			SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	PENDULUM CASTING: Galvanize plated, grade 32510,
000-0225		4	malleable iron
016-0006	BRONZE BEARING .377" X .75" X .75"	4	BRONZE BEARING .377" X .75" X .75": Oil impregnated, bronze.
030-1835	SWING BEAM, 5" OD X 130"	1	SWING REAM 5" OD X 120" One piece all wolded construction
030-1981	ARCH POST, ADD-ON 5" OD SWING	1	<u>SWING BEAM, 5" OD X 130"</u> : One piece all welded construction consisting of 5" OD x 11 GA galvanized steel tubing and 8 GA
036-0227 036-0788	HARDWARE PACKAGE HARDWARE PACKAGE	1 2	galvanized steel plate. Finished with a baked on powder coating.
036-1414	HARDWARE PACKAGE	1	ARCH POST, ADD-ON 5" OD SWING: One piece all welded
046-2197	LOCTITE	1	construction consisting of 5" OD x 11 GA & 3/8" Schedule 40
			galvanized steel pipe and 4 1/2" OD x 11 GA steel tubing
			w/cadmium and yellow chromate plating, and an assembly of 3/8" nut inserts. Finished with a baked on powder coating.
			nut inserts. I misned with a baked on powder coating.
			HARDWARE PACKAGE: Stainless steel.
			HARDWARE PACKAGE: 5/16" Shackle with a 3/8" X 1 5/32"
			bolt.
			HADDWARE DACKACE: Steinlass steel weekers & service and
			HARDWARE PACKAGE: Stainless steel washers & screws and zinc plated steel lock nuts & washers.
			<u>LOCTITE</u> : Thread Locker; CAUTION: May irritate eyes, skin and respiratory system. Contains: polyglycol dimethacrylate,
			polyglycol oleate propylene clycol, titanium dioxide, and cumene
			hydroperoxide.
Note: Hardware package(s) may include extra hardware			
that is not necessary for this installation.			SHIPPING WEIGHT: 224 LBS.

- 1. Determine 5" OD post locations per dimensions shown.
- 2. Dig footing holes. See typical concrete footing drawing for 5" OD posts, which is located in the preface of the installation manual.
- 3. Attach 5" OD x 130" SWING BEAM to arch post end and ARCH POST, ADD-ON 5" SWING 8' by sleeving the swing beam over arch post and fasten using 3/8" X 1" SS button head cap screws. Tighten the hardware. See DETAIL B.
- 4. Position frame into footing holes. Block up, plumb, and level frame.
- 5. Pour concrete and allow it to set for 2 to 3 days.
- 6. Insert BRONZE BEARING .377" X .75" X .75" into PENDULUMS and attach to swing beam as shown in DETAIL A. Tighten hardware.
- 7. Attach swing chain to pendulum using CLEVIS SHACKLE W/ BOLT. Tighten hardware. See DETAIL A.
- 8. INSTALL RESILIENT SURFACING MATERIAL.