#### MANUFACTURER INSTALLATION SPECIFICATIONS

These installation specifications are intended to provide assistance in bidding and to verify correct delivery when materials have been shipped by the manufacturers to the Contractor.

- Burke 30-95966-3A Ramp-connected main structure
- Little Tykes Revolution Spinner
- Miracle P961 Buzzy Bumple Bee Spring Rider
- Playworld Systems Add-A-Bay Arch Swing: Accessible Swing Seat / Belt Swing Seat / Infant-Tot Swing Seat
- Playworld Systems Cozy Cocoon

The Contractor shall refer to the site plan in Contract 7927, 2017 Brittingham Park Accessible Playground for site layout.



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 designation.
- 2. The letter designation for the upright posts can also be found on the packaging of each post and there is a chart for reference located in the Appendix of this manual starting on page 33.
- 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, 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.
- 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.

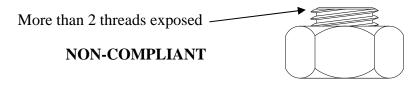


Figure 1: Thread Protrusion

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

## **GENERAL INSTALLATION GUIDELINES**

- 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.

- 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).
- 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.

## **GENERAL INSTALLATION GUIDELINES**

BCI Burke Company, LLC

17. 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).

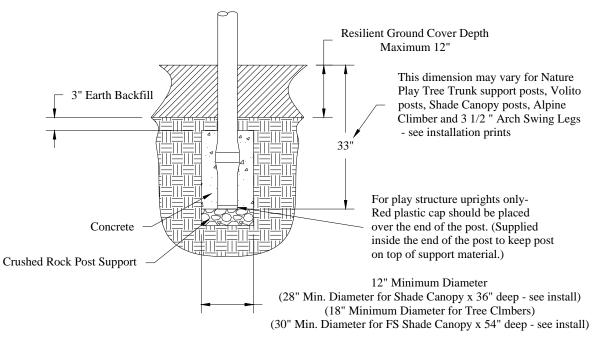


# **NO IMPACT WRENCHES**

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.

## **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** 

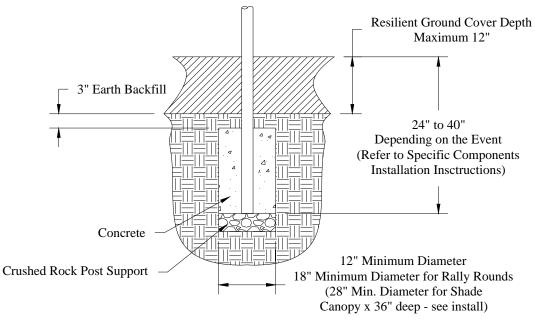
Support Post Footing Detail is used for the following:

- 5" OD TUBING
- 3 1/2" OD TUBING
- ALL SQUARE TUBING
- 12' x 12' AND 15' X 15' SHADEPLAY CANOPY POSTS (33" MIN DEPTH)
- 15' X 19', 15' X 21', HEX AND ARA SHADEPLAY CANOPY POSTS (36" MIN DEPTH)

#### **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.

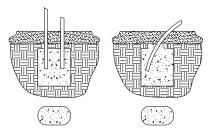
## **TYPICAL CONCRETE FOOTINGS**



**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:**

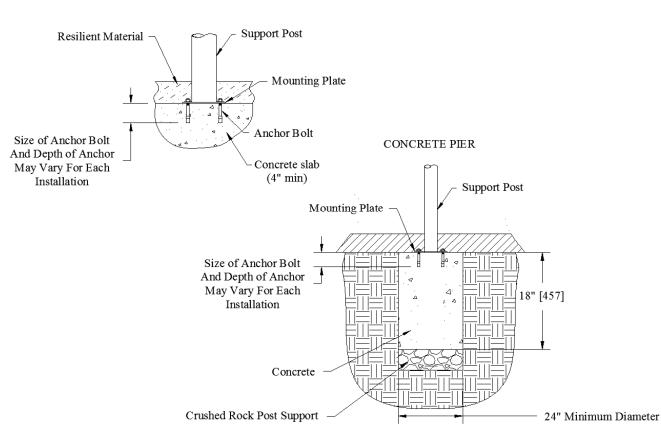
- 1. Consult your local building codes to assure proper depth of footings. The required diameter and depth of the concrete can vary depending on soil conditions and temperature extremes.
- 2. In cold weather climates the concrete should be deep enough to reach below the frost line, especially the main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

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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:**

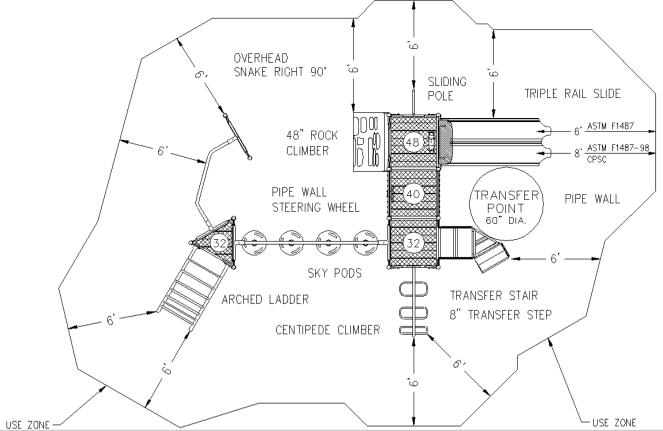
- 1. Consult your local building codes to ensure the use of the proper anchor bolt size.
- 2. Concrete must have the proper amount of curing time to ensure that anchors have maximum holding power.
- 3. Existing concrete is to be free of cracks and heaving in areas where anchor bolts are to be installed.

#### BCI Burke Company, LLC

## **RESILIENT SURFACING MATERIAL**

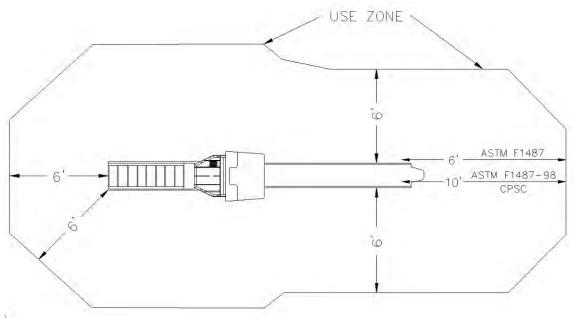
As the owner of a playground, you are responsible for understanding the recommendations for surfacing and providing and maintaining an appropriate impact attenuating surface material under and around all playground equipment.

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.)



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

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



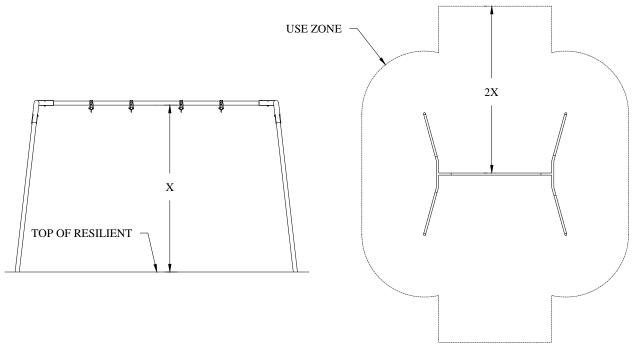
**Figure 7: Use Zone for Slides** 

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** 

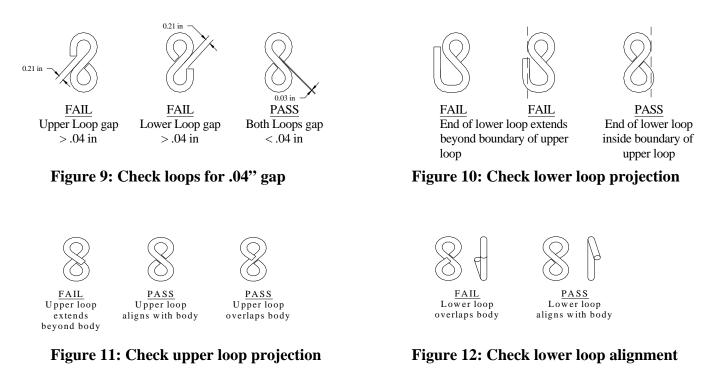
An impact attenuating surfacing material is required under and around all equipment. The Playground Surfacing Technical Information Guide published by the U. S. Consumer Product Safety Commission contains the results of tests performed to determine the relative shock-absorbing properties of seven loose-fill 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 Loose-fill material	Protects to fall height of:
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.

Table 1: CPSC Criti	cal Fall Heights (taken	from pub. 325, page 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



## WARNING AND MANUFACTURER LABELS

#### The following is the Owner's 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.



BCI Burke Company, LLC Fond du Lac, WI USA 1-800-356-2070

w heiburke.com

12345

Equipment identification label for entire play area unless otherwise labeled

10/28/2016

Structure: 99-99999-1

Burke.

AWARNING

000-356-2070 | beiburke.cs

Order:

Date:

surfac

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.

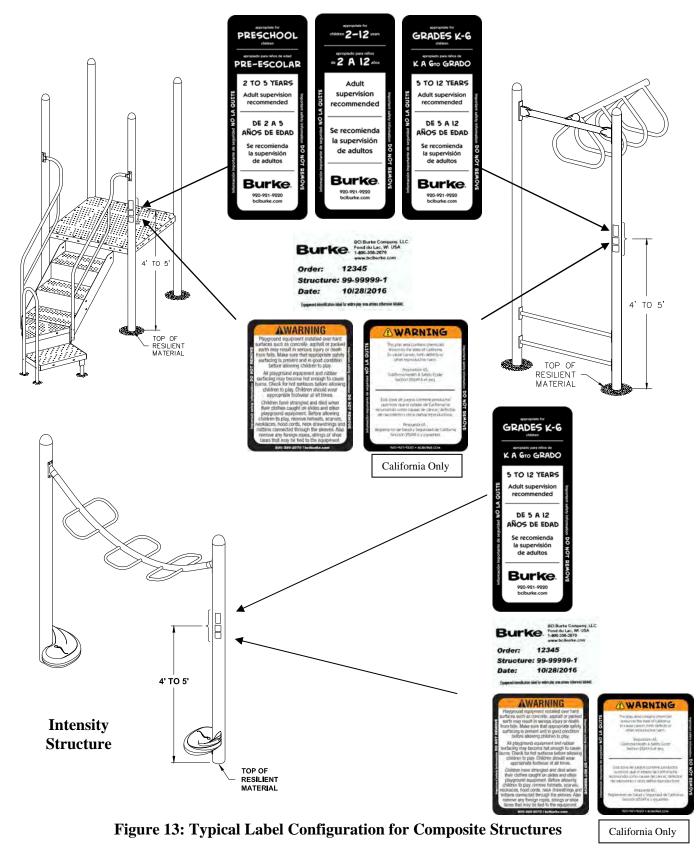
Equipment Identification Label and cover label - Place this label and clear protective cover label on all equipment, either directly below the Ageappropriate designation or as the top most label for equipment that does not have a specific age-appropriate label. See Figures 13, 14 and 15. This label provides 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



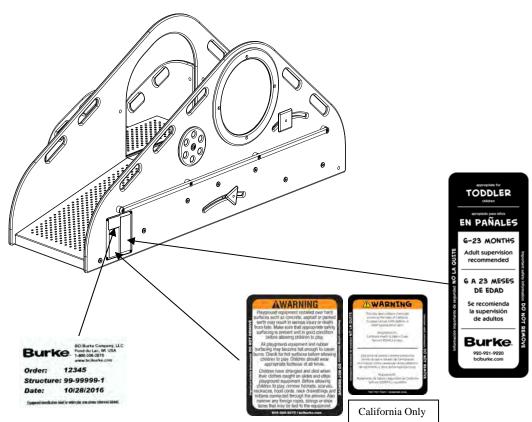


Figure 14: Typical Label Configuration for Composite Structures

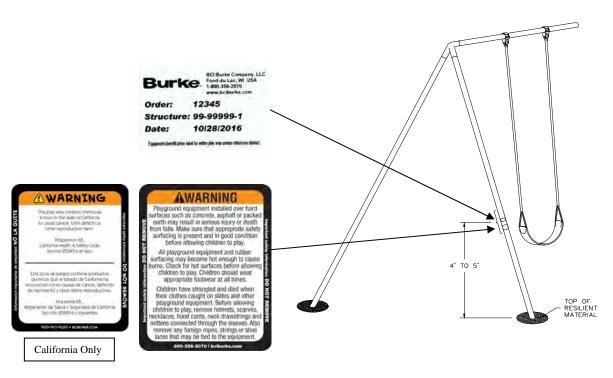


Figure 15: Typical Label Configuration for Non-Age Specific Equipment

## **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

BCI Burke Company, LLC

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.

#### **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.
- 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.

#### **Special Notes:**

- 1. Check Material Safety Data Sheet before starting to ensure safety.
- 2. Do not open container of repair material until ready to use.
- 3. As soon as you finish using the container with repair material, close it tightly immediately so it does not dry out.

## **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.

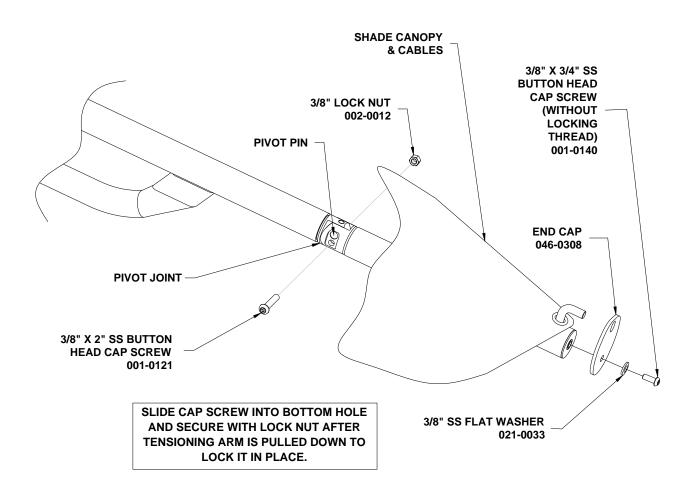
To re-install the ShadePlay canopy:

- 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.





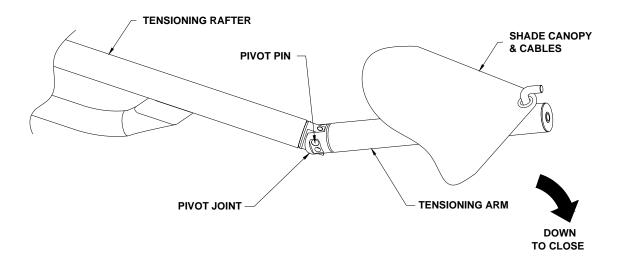
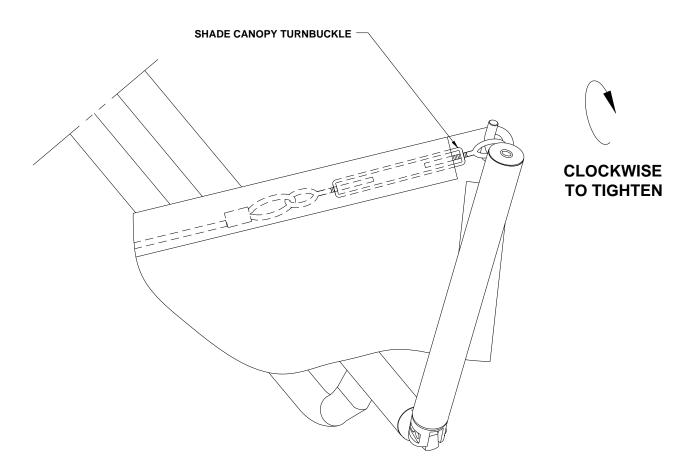
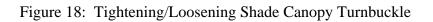


Figure 17: Tensioning Arm in 'Open Position'





## **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.</li> </ul>
	Duracell Ultra or better).
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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## **Frequency of General Maintenance**

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

## **General Maintenance Checklist**

F	<u> </u>	-	-	1	1	1	r	1	1	1		
Date												
Visible cracks, bending, warping												
Accessible sharp edges or 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												
Pinch or crush 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												

#### **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>TM</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

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.

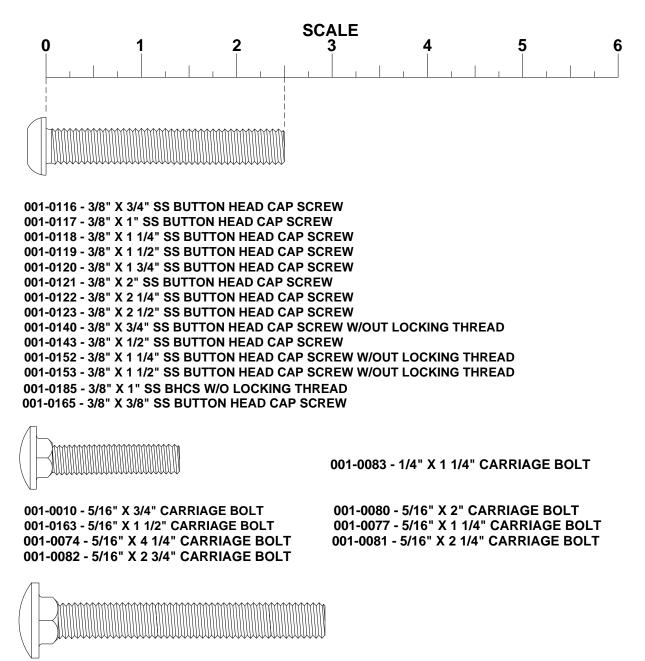
**Loss or Damage in Transit:** A signed bill of lading is our receipt from a carrier that our shipment to you was complete and in good condition upon arrival. Before you sign, please check the Bill of Lading carefully when the shipment arrives to make sure nothing is missing and there are no damages.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

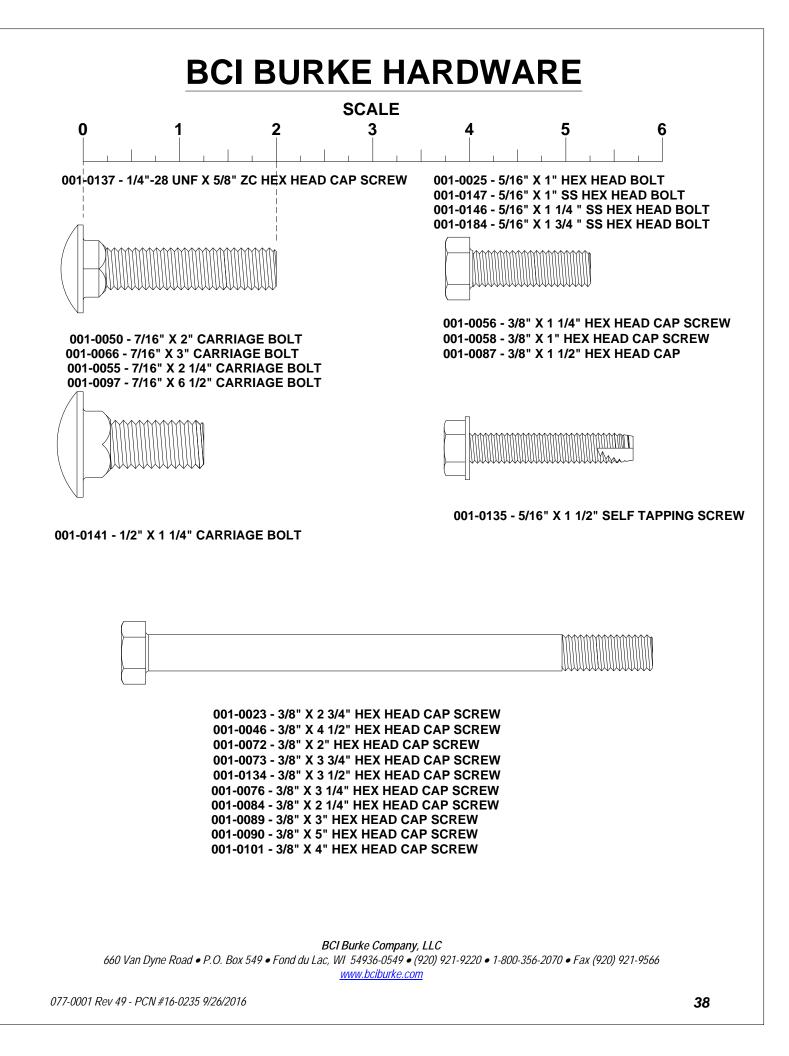
*BCI Burke Company, LLC* 660 Van Dyne Road • P.O. Box 549 • Fond du Lac, WI 54936-0549 • (920) 921-9220 • 1-800-356-2070 • Fax (920) 921-9566 <u>www.bciburke.com</u>

# **BCI BURKE HARDWARE**

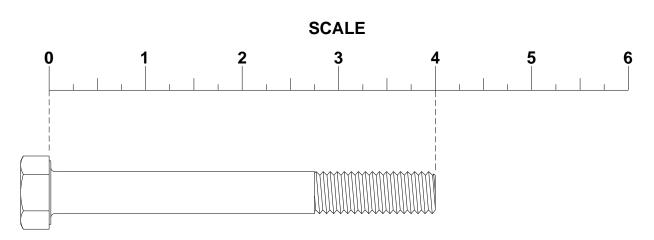


001-0018 - 3/8" X 3/4" CARRIAGE BOLT 001-0048 - 3/8" X 2 3/4" CARRIAGE BOLT 001-0098 - 3/8" X 3" CARRIAGE BOLT 001-0053 - 3/8" X 2 1/4" CARRIAGE BOLT 001-0039 - 3/8" X 2 1/2" CARRIAGE BOLT 001-0054 - 3/8" X 2 1/2" CARRIAGE BOLT 001-0068 - 3/8" X 1 1/4" CARRIAGE BOLT

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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



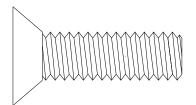
001-0037 - 7/16" X 3" HEX HEAD CAP SCREW - SLOTTED 001-0047 - 7/16" X 4 1/2" HEX HEAD CAP SCREW - SLOTTED

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

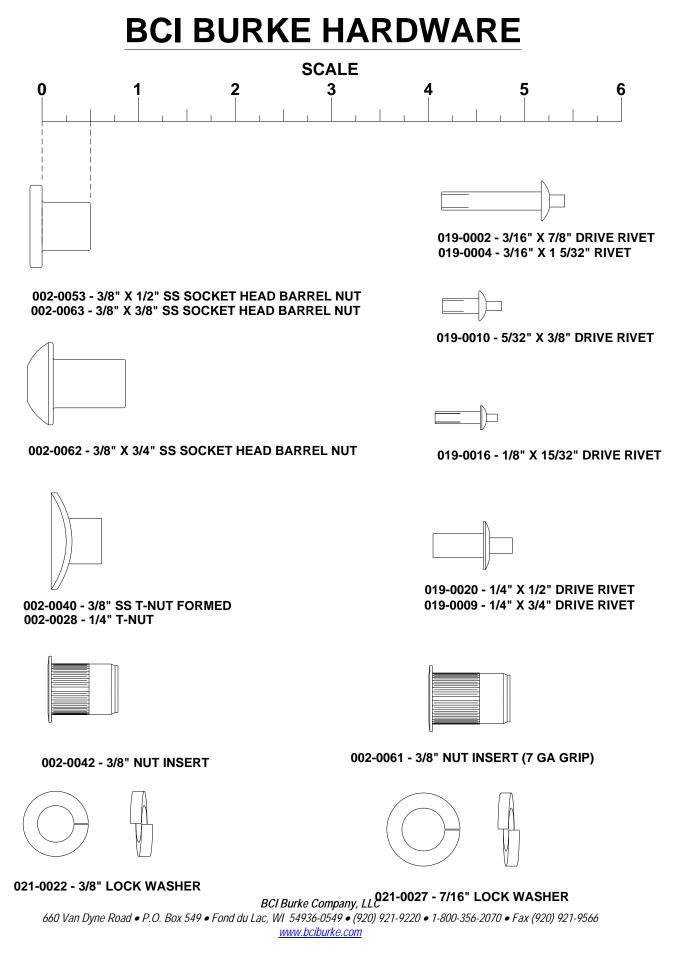
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002-0005 - 7/16" LOCK NUT

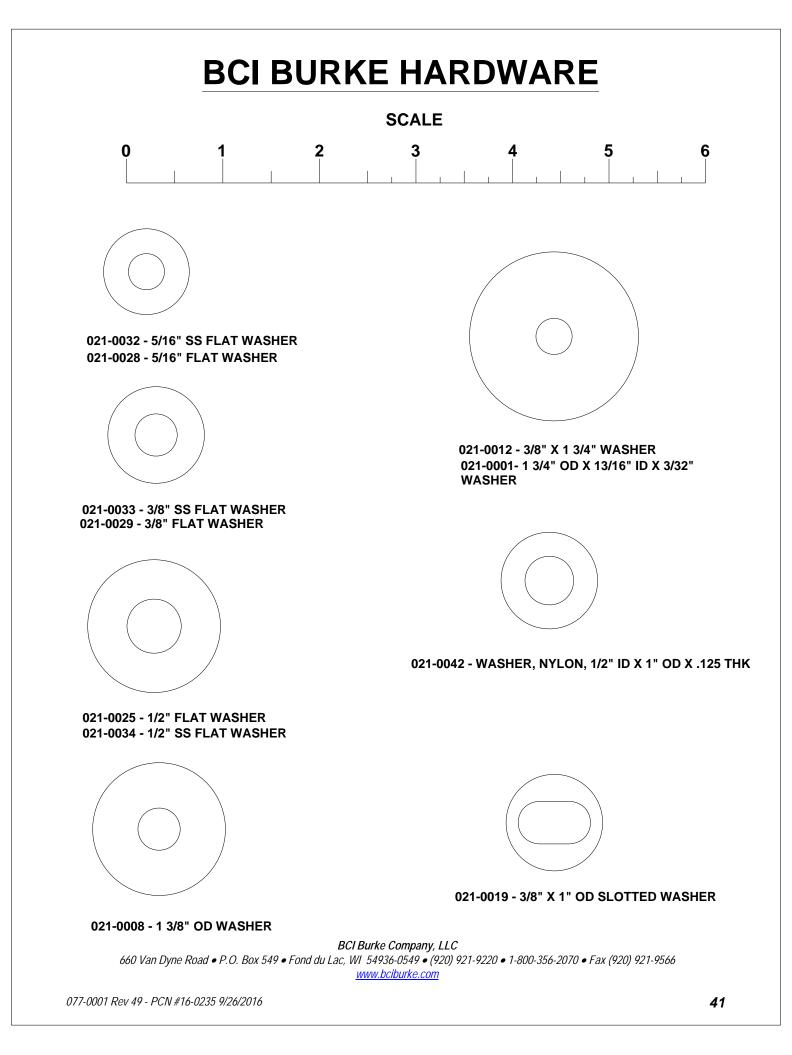
002-0004 - 1/2" LOCK NUT 002-0049 - 1/2" SS LOCK NUT

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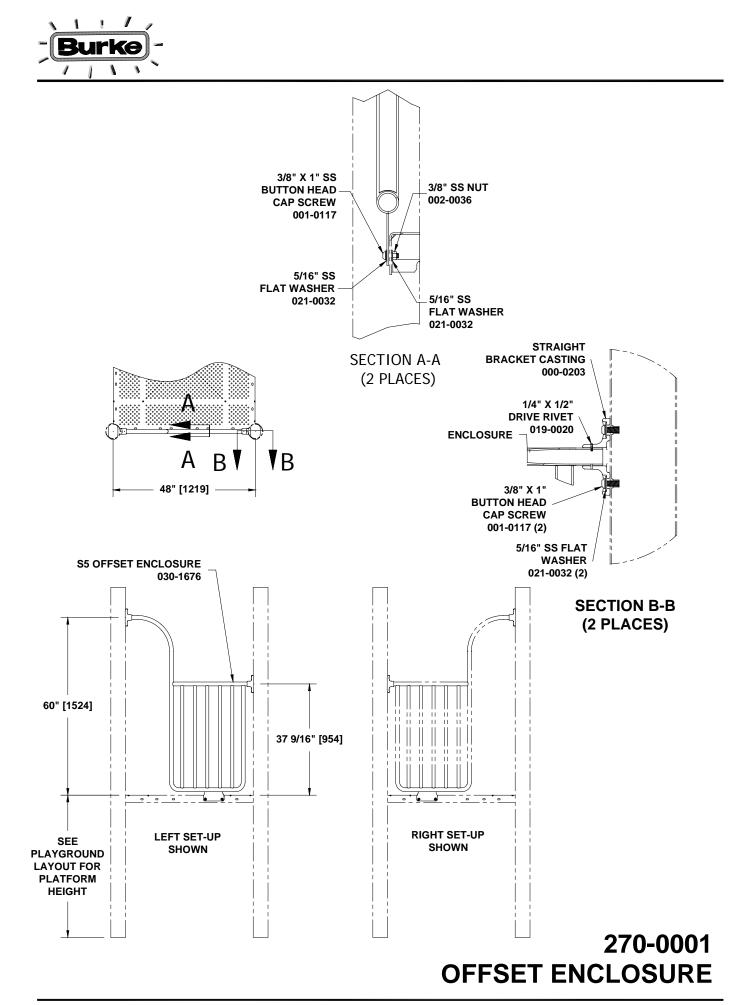


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**Installation Instructions** 

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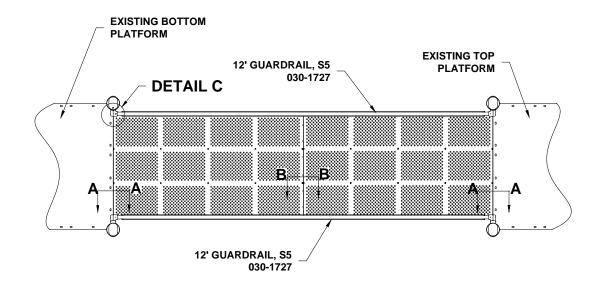


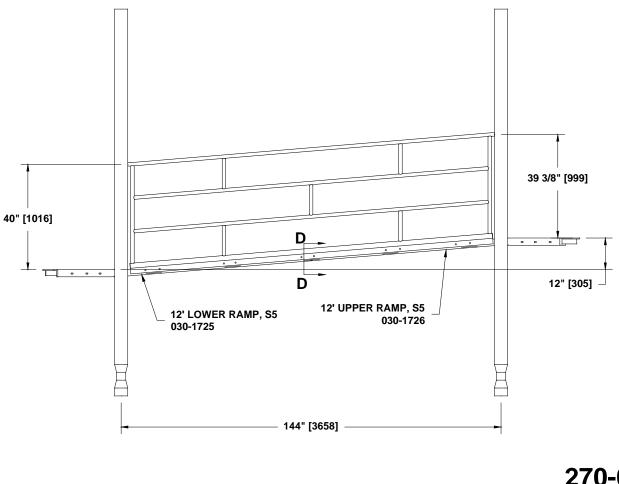
	PARTS LIST	1	SPECIFICATIONS
PART NO. 000-0203 030-1676 036-1284 Note: Hardw	ARTS LIST DESCRIPTION CASTING, STRAIGHT BRACKET S5 OFFSET ENCLOSURE HARDWARE PACKAGE	QTY 2 1	SPECIFICATIONS <u>CASTING, STRAIGHT BRACKET</u> : A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating. <u>S5 OFFSET ENCLOSURE</u> : One piece all welded construction consisting of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14 GA galvanized steel tubing, and 10 GA sheet steel. Finished with a baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.
that is not ne	ecessary for this installation.		SHIPPING WEIGHT: 30 LBS.

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

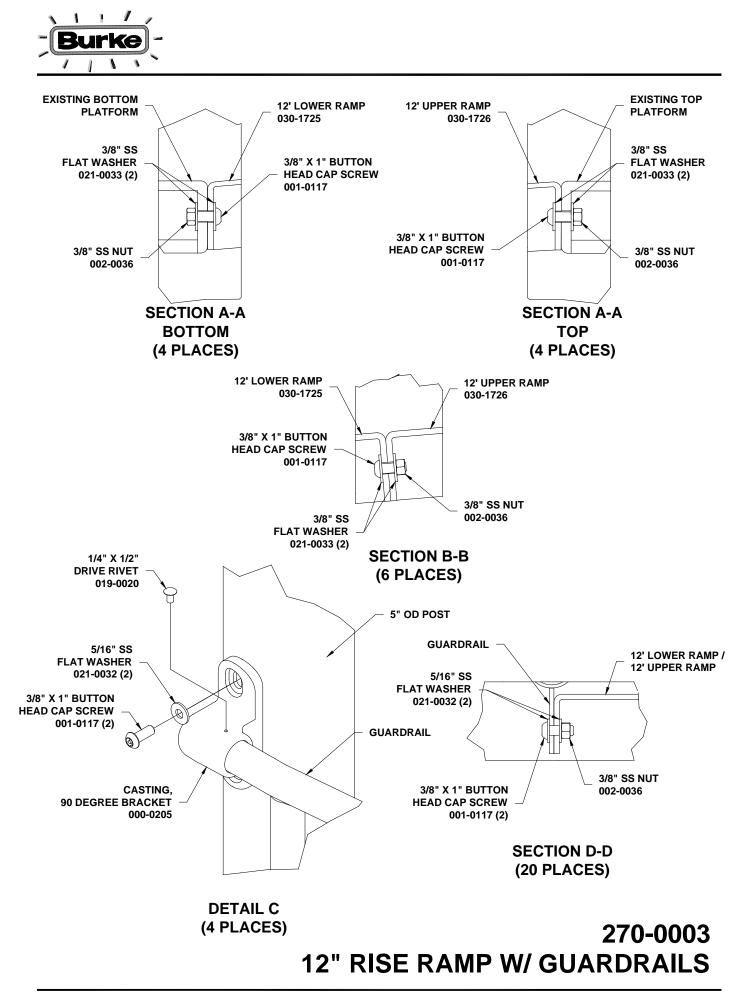
- 1. Locate holes for BRACKETS CASTINGS to 5" O.D. posts as per dimensions shown.
- 2. Insert bracket castings onto ends of OFFSET ENCLOSURE and attach bracket castings to 5" O.D. posts using 3/8" x 1" button head cap screws and 5/16" washers as shown. See SECTION B-B.
- 3. Attach bottom of pipe wall to platform using 3/8" x 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. Tighten all hardware. See SECTION A-A.
- 4. Drill 1/4" diameter holes through pilot hole in casting and into enclosure. See SECTION B-B.
- 5. Drive rivets flush with brackets.
- 6. Tighten All Hardware.







270-0003 12" RISE RAMP W/ GUARDRAILS



	— PARTS LIST ———		SPECIFICATIONS
030-1725 030-1726 030-1727 036-1114	DESCRIPTION CASTING, 90 DEGREE BRACKET 12' LOWER RAMP, S5 12' UPPER RAMP, S5 12' GUARDRAIL, S5 HARDWARE PACKAGE	<u>QTY</u> 4 1 2 1	SPECIFICATIONS         CASTING, 90 DEGREE BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.         12' LOWER RAMP, S5; 12' UPPER RAMP, S5: One piece all welded construction consisting of 12 GA surfaces and 7 GA gussets. PVC coated after fabrication.         12' GUARDRAIL, S5: One piece all welded construction consisting of 1.315" OD x 14 GA & 1.900" OD x 11 GA galvanized steel tubing and 12 GA. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.
	are package(s) may include extra hardv cessary for this installation.	vare	SHIPPING WEIGHT: 509 LBS.

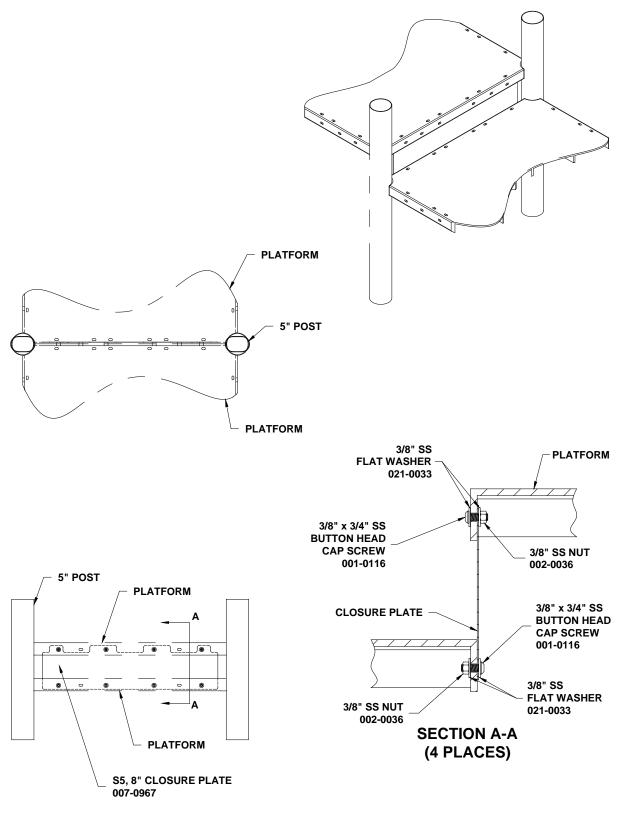
#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of 12" rise ramp.
- 2. Support upper of 12' lower ramp.
- 3. Attach 12' LOWER RAMP to existing lower platform using 3/8" X 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION A-A BOTTOM.
- 4. Attach 12' UPPER RAMP to existing upper platform and 12' lower ramp using 3/8" X 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION A-A TOP and SECTION B-B.
- 5. Attach 12' GUARDRAILS to 12' lower and upper ramps using 3/8" X 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. See SECTION D-D.
- 6. Sleeve CASTING, 90 DEGREE BRACKETS onto ends of guardrails and attach to 5" OD posts using 3/8" X 1" SS button head cap screws and 5/16" SS washers. See DETAIL C.
- 7. Tighten all hardware.
- 8. Drill 1/4" hole through castings and barriers using the dimple in the casting as a drill point. See DETAIL C.
- 9. Drive 1/4" rivet into hole. (4 places) See DETAIL C.

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

270-0003.doc Description: 12" RISE RAMP W/ GUARDRAILS REV: 02 PCN: 16-0282 12/8/2016





270-0050 8" CLOSURE PLATE

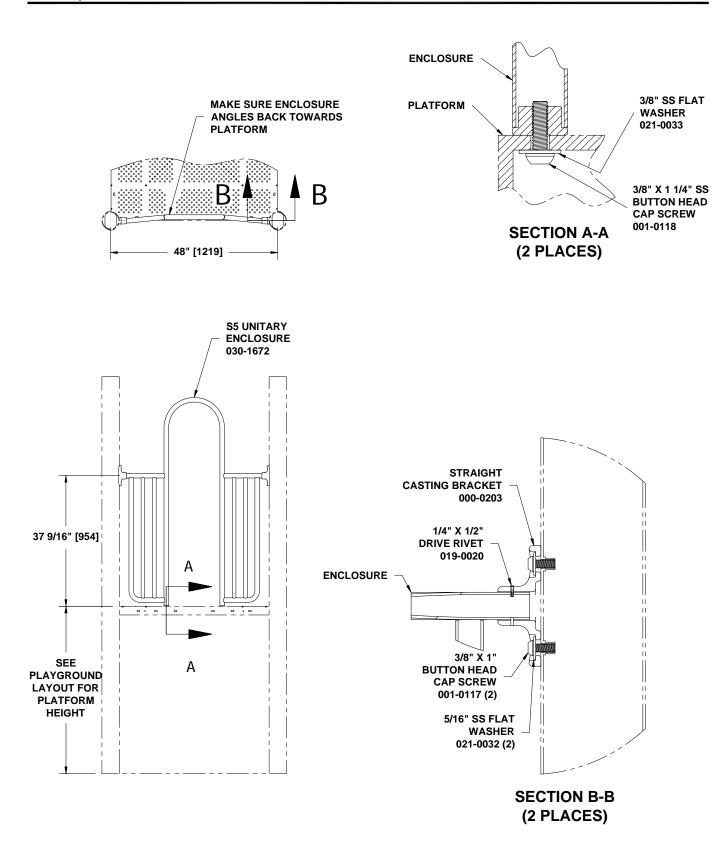
PART NO. 007-0967 036-1102	PARTS LIST DESCRIPTION S5 8" CLOSURE PLATE HARDWARE PACKAGE	<u>QTY</u> 1 1	SPECIFICATIONS           S5 8" CLOSURE PLATE: 14 GA galvanized steel plate           finished with a baked on powder coating.           HARDWARE PACKAGE: Stainless steeel
Note: Hardw that is not ne	are package(s) may include extr acessary for this installation.	a hardware	SHIPPING WEIGHT: 10 LBS.

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

- Attach CLOSURE PLATE to upper and lower platform using 3/8" x 3/4"SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. See SECTION A-A.
   Tighten hardware.

270-0050.doc Description: 8" CLOSURE PLATE REV: 02 PCN: 13-0089 5/10/2013



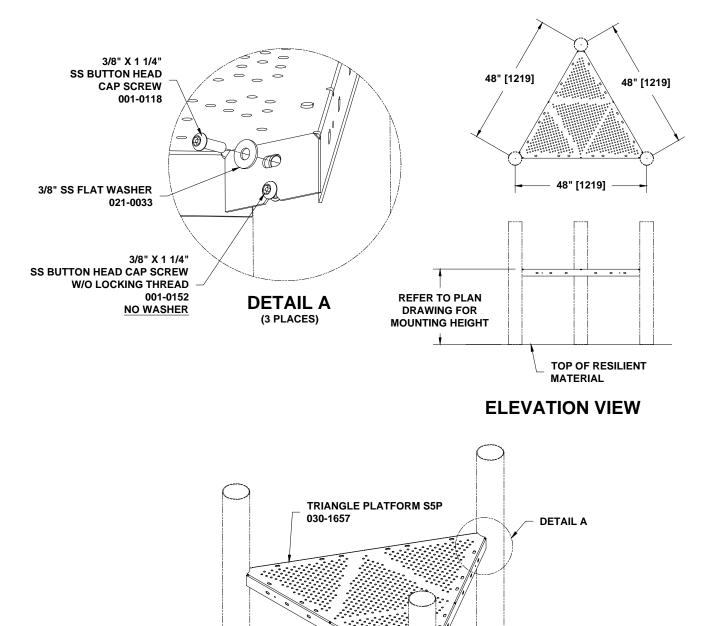


## 270-0112 UNITARY ENCLOSURE

	PARTS LIST		SPECIFICATIONS		
PART NO. 000-0203 030-1672 036-0197 036-0819	CASTING, STRAIGHT BRACKET S5 UNITARY ENCLOSURE HARDWARE PACKAGE HARDWARE PACKAGE	QTY 2 1 1	CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating. S5 UNITARY ENCLOSURE: One piece all welded construction consisting of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14 GA galvanized steel tubing, and HDPE threaded inserts. Finished with a baked on powder coating. HARDWARE PACKAGE: Stainless steel. HARDWARE PACKAGE: Aluminum Rivets		
	vare package(s) may include extra hardv ecessary for this installation.	vare	SHIPPING WEIGHT: 35 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. NOTE: Make sure enclosure angles back towards platform. (See Top View)					

- 1. Locate holes for CASTING BRACKETS to 5" O.D. posts as per dimensions shown.
- 2. Insert castings onto ends of UNITARY ENCLOSURE and attach top hole of brackets to 5" O.D. posts using 3/8" x 1" button head cap screws and 5/16" washers as shown. See SECTION B-B.
- 3. Rotate unitary enclosure up 90 degrees and attach bottom hole of brackets to 5" O.D. posts using 3/8" x 1" button head cap screws and 5/16" washers as shown. See SECTION B-B.
- 4. Rotate unitary enclosure down 90 degrees and attach to platform using 3/8" x 1 1/4" button head cap screws and 3/8" washers as shown. Tighten screws. See SECTION A-A. See FRONT VIEW.
- 5. Drill 1/4" diameter hole through pilot hole in brackets through enclosure. Insert DRIVE RIVET. Drive rivets flush.
- 6. Tighten all Hardware.



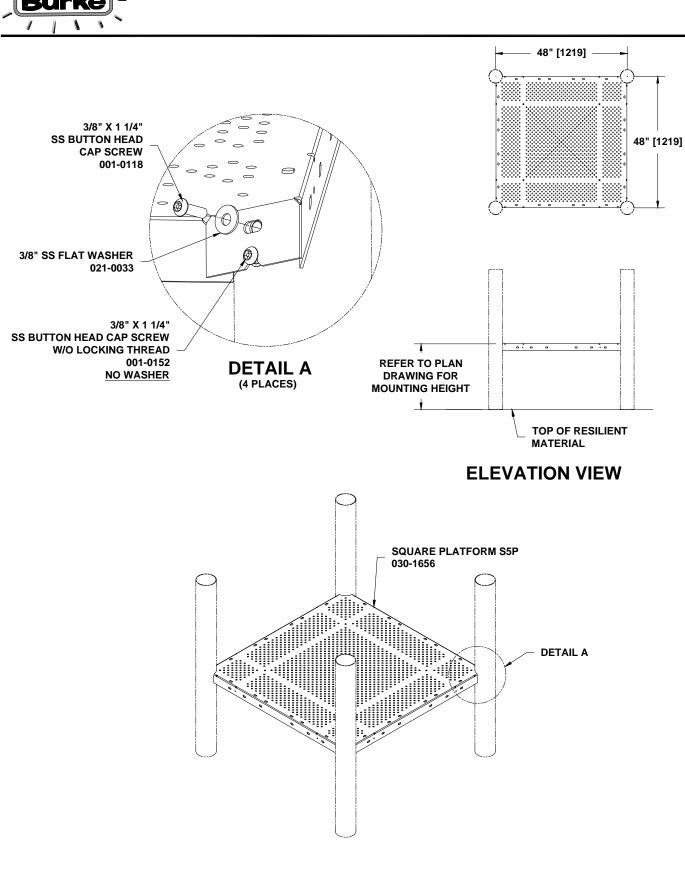


270-0129 TRIANGLE PLATFORM S5P

	= PARTS LIST		SPECIFICATIONS
	PARTS LIST DESCRIPTION NANGLE PLATFORM S5P ROWARE PACKAGE	<u>QTY</u> 1 1	SPECIFICATIONS           TRIANGLE PLATFORM S5P:         12 GA HRPO sheet, finished with a PVC Coating           HARDWARE PACKAGE:         Stainless steel
Note: Hardware that is not neces	package(s) may include extra sary for this installation.	hardware	SHIPPING WEIGHT: 48 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 TRIANGLE PLATFORM S5P 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.



## 270-0130 SQUARE PLATFORM S5P

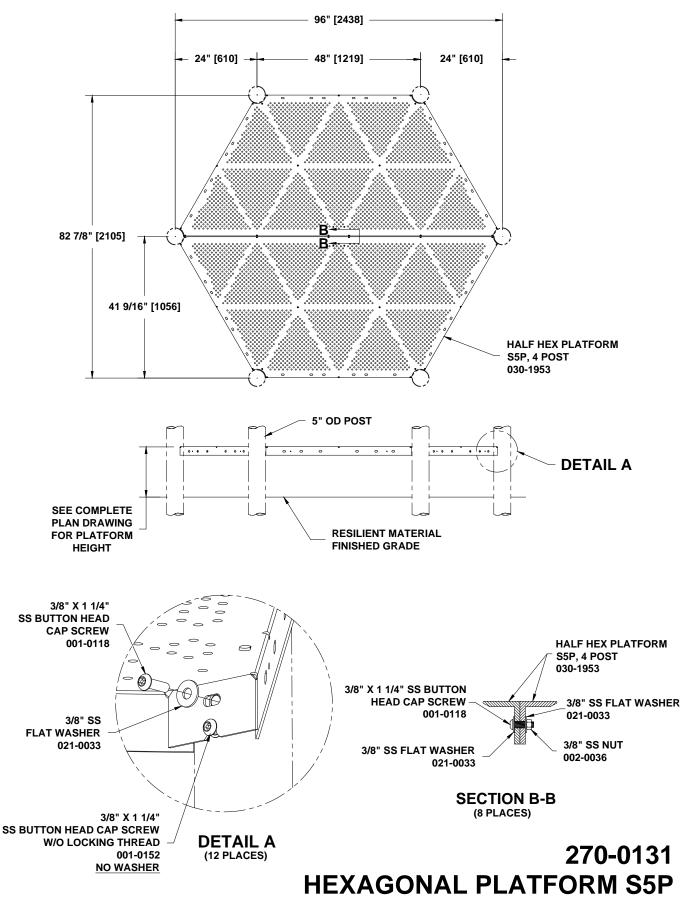
	— PARTSLIST —		SPECIFICATIONS
PART NO. 030-1656 036-1101	PARTS LIST DESCRIPTION SQUARE PLATFORM S5P HARDWARE PACKAGE	<u>QTY</u> 1 1	SPECIFICATIONS SQUARE PLATFORM S5P: 12 GA HRPO sheet, finished with a PVC Coating HARDWARE PACKAGE: Stainless steel
Note: Hardw that is not n	ware package(s) may include extra ecessary for this installation.	a hardware	SHIPPING WEIGHT: 106 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 four corners of the 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.
- 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.

270-0130.doc Description: SQUARE PLATFORM REV: 01 PCN: 13-0089 5/10/2013



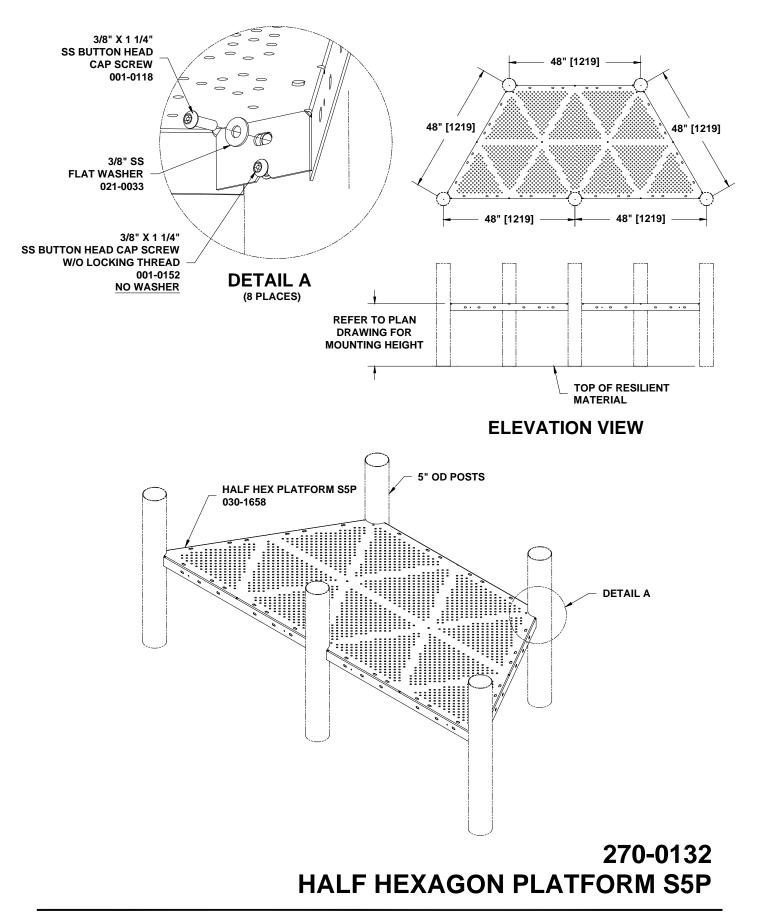


PART NO. 030-1953 036-1108	PARTS LIST DESCRIPTION HALF HEX 4 POST S5 PLATFORM HARDWARE PACKAGE	<u>QTY</u> 2 1	SPECIFICATIONS         HALF HEX 4 POST S5 PLATFORM: One piece platform all welded construction consisting of 12 GA surfaces, gussets, and corner plates. PVC coated after fabrication.         HARDWARE PACKAGE: Stainless steel
Note: Hardw that is not no	vare package(s) may include extra hardv ecessary for this installation.	/are	SHIPPING WEIGHT: 287 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 four corners of the HALF HEX PLATFORM onto the partially threaded cap screws on each post.
- 4. Complete attaching platforms 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. Attach other section to hex platforms using 3/8" x 1 1/4" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nut. Note: If this unit gets a hex roof, place roof on posts before cementing. See SECTION B-B.
- 6. Level platform and plumb posts.
- 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.



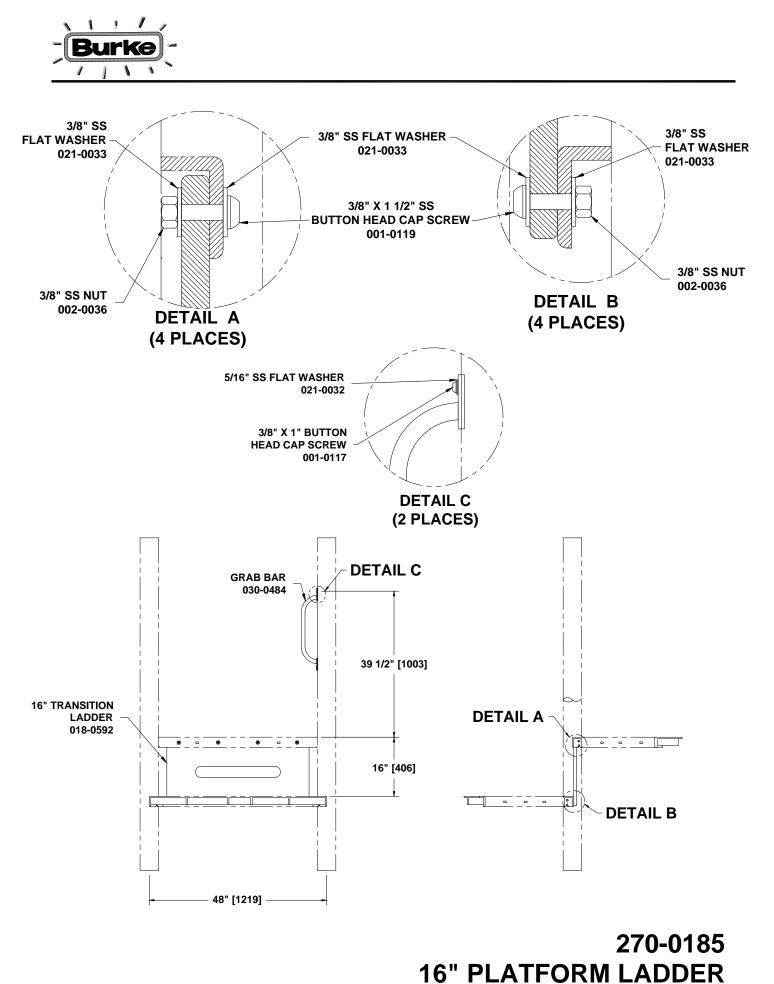


	— PARTS LIST —		SPECIFICATIONS
PART NO. 030-1658 036-1101	PARTS LIST DESCRIPTION HALF HEX PLATFORM S5P HARDWARE PACKAGE	<u>QTY</u> 1 2	SPECIFICATIONS <u>HALF HEX PLATFORM S5P</u> : 12 GA HRPO sheet, finished with a PVC Coating <u>HARDWARE PACKAGE</u> : Stainless steel
Note: Hardw that is not ne	vare package(s) may include extra ecessary for this installation.	hardware	SHIPPING WEIGHT: 144 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 four corners of the HALF HEX 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.
- 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.

270-0132.doc Description: HALF HEXAGON PLATFORM REV: 01 PCN: 13-0089 5/10/2013

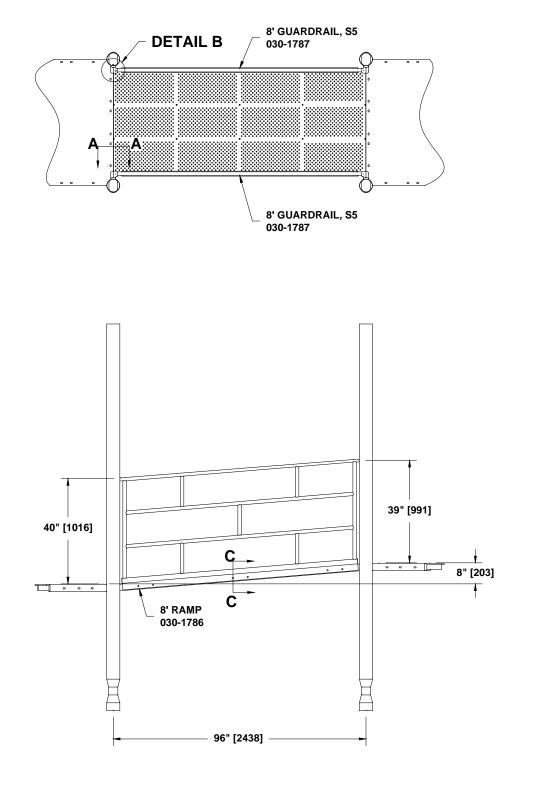


			SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	16" TRANSITION LADDER: 3/4" HDPE
018-0592 030-0484 036-0258 036-0448	16" TRANSITION LADDER GRAB BAR HARDWARE PACKAGE HARDWARE PACKAGE	1 1 2	GRAB BAR: One piece all welded construction consisting of 1.029" OD x 14 GA galvanized steel tubing and formed 3/16" stainless steel plates. Finished with a baked on powder coating. HARDWARE PACKAGE: HARDWARE PACKAGE: Stainless steel.
	ware package(s) may include extr ecessary for this installation.	a hardware	SHIPPING WEIGHT: 10 LBS.

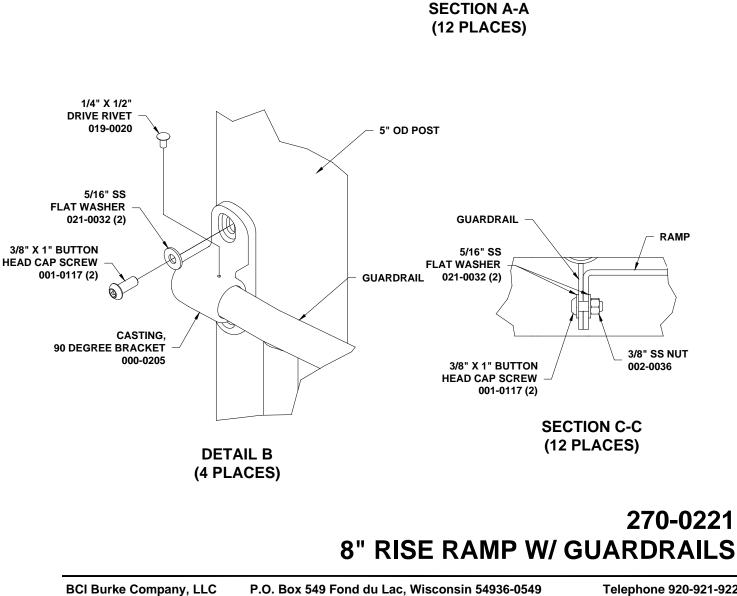
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

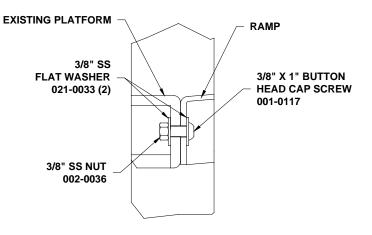
- Attach 16" TRANSITION LADDER to upper and lower platform using 3/8" X 1 1/2" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. See DETAIL A and DETAIL B.
- Attach GRAB BAR using 3/8" X 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL C.
- 3. Tighten all hardware.





270-0221 8" RISE RAMP W/ GUARDRAILS







Telephone 920-921-9220

	PARTS LIST		SPECIFICATIONS
PART NO. 000-0205 030-1786 030-1787 036-1114	DESCRIPTION CASTING, 90 DEGREE BRACKET 8' RAMP 8' GUARDRAIL, S5 HARDWARE PACKAGE	<u>QTY</u> 4 1 1	SPECIFICATIONS         CASTING, 90 DEGREE BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.         8' RAMP: One piece all welded construction consisting of 12 GA surfaces and 7 GA gussets. PVC coated after fabrication.         8' GUARDRAIL, S5: One piece all welded construction consisting of 1.315" OD x 14 GA & 1.900" OD x 11 GA galvanized steel tubing and 12 GA. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.
	are package(s) may include extra hardwecessary for this installation.	vare	SHIPPING WEIGHT: 356 LBS.

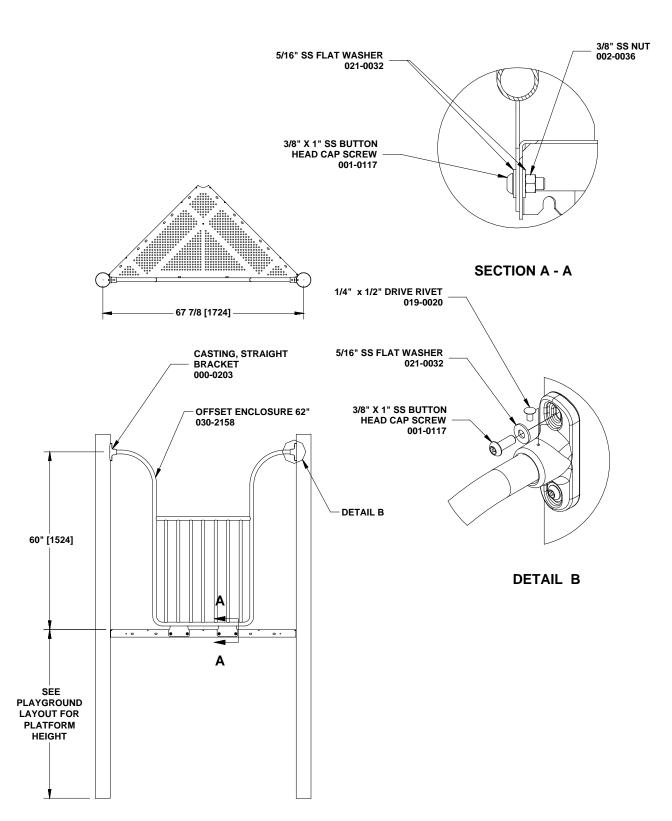
#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of 8" rise ramp.
- 2. Attach 8' RAMP to existing lower and upper platform using 3/8" X 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION A-A.
- 3. Attach 8' GUARDRAILS to ramp using 3/8" X 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. See SECTION C-C.
- 4. Sleeve CASTING, 90 DEGREE BRACKETS onto ends of barriers and attach to 5" OD posts using 3/8" X 1" SS button head cap screws and 5/16" SS washers. See DETAIL B.
- 5. Tighten all hardware.
- 6. Drill 1/4" hole through castings and barriers using the dimple in the casting as a drill point. See DETAIL B.
- 7. Drive 1/4" rivet into hole. See DETAIL B.

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

270-0221.doc Description: 8" RISE RAMP W/ GUARDRAILS REV: 02 PCN: 13-0299 1/14/2014





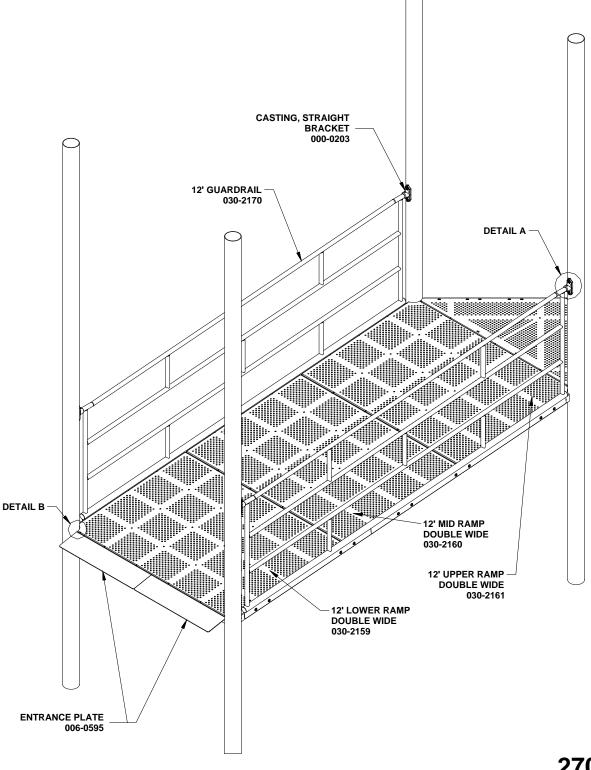
### 270-0268 CENTERED ENCLOSURE 62"

	— PARTS LIST —		SPECIFICATIONS
PART NO. 000-0203 030-2158 036-0258 036-0806 036-0819	PARTS LIST <u>DESCRIPTION</u> CASTING, STRAIGHT BRACKET CENTERED ENCLOSURE 62" HARDWARE PACKAGE HARDWARE PACKAGE HARDWARE PACKAGE	<u>QTY</u> 2 1 4 1	SPECIFICATIONS         CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating.         CENTERED ENCLOSURE 62": One piece all welded construction consisting of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14 GA galvanized steel tubing, and 10 GA sheet steel. Finished with a baked on powder coating.         HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless steel.         HARDWARE PACKAGE: Aluminum Rivets
	ecessary for this installation.		SHIPPING WEIGHT: 43 LBS.

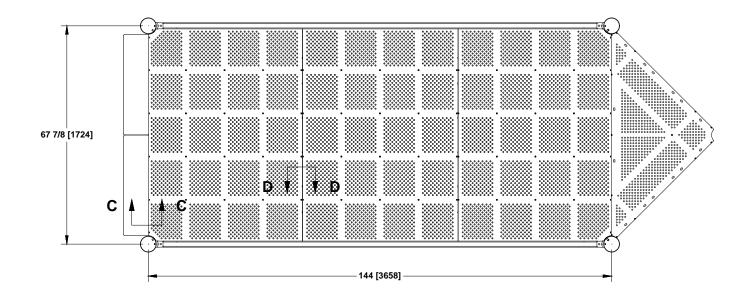
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

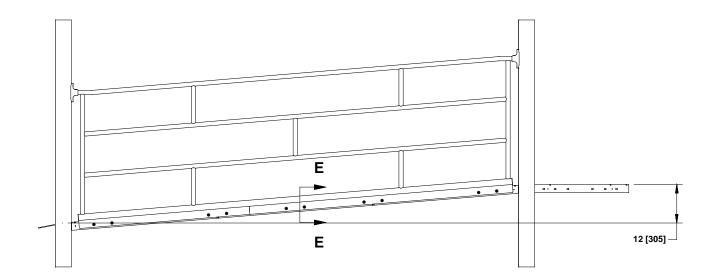
- 1. Locate holes for BRACKET CASTINGS on 5" O.D. posts as per dimensions shown.
- 2. Insert bracket castings onto ends of CENTER MOUNT ENCLOSURE and attach bracket castings to 5" O.D. posts using hardware specified in DETAIL B.
- 3. Attach bottom of enclosure to platform using hardware specified in SECTION A-A.
- 4. Drill 1/4" diameter holes through pilot hole in casting and into enclosure. See DETAIL B.
- 5. Drive rivets flush with brackets.
- 6. Tighten All Hardware.





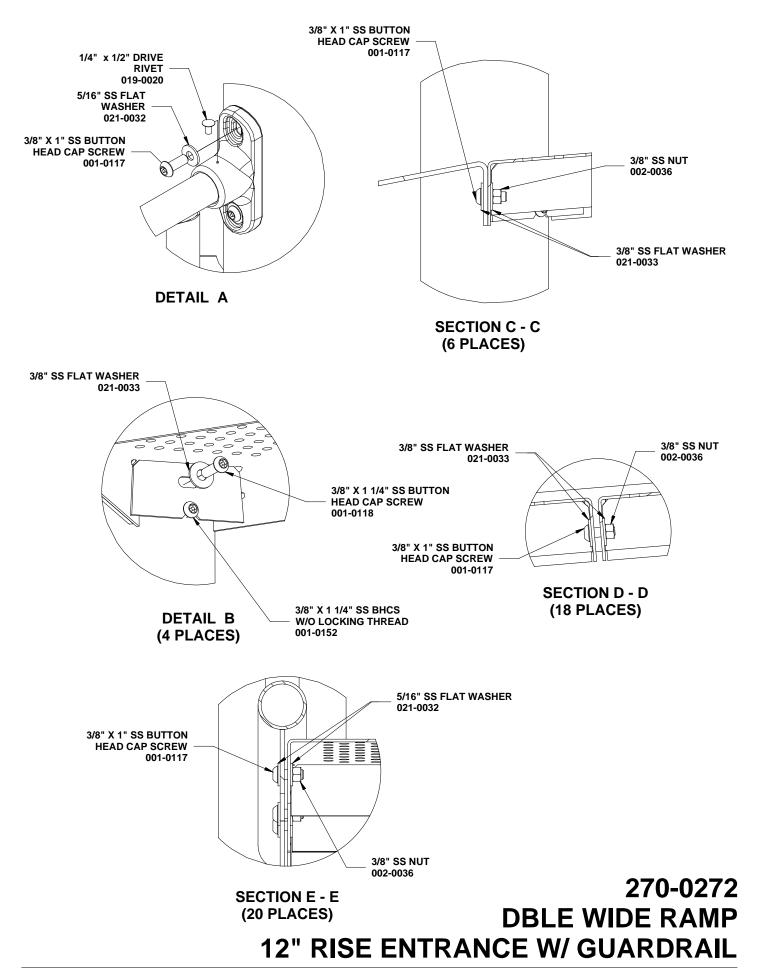
### 270-0272 DBLE WIDE RAMP 12" RISE ENTRANCE W/ GUARDRAIL





# 270-0272 DBLE WIDE RAMP 12" RISE ENTRANCE W/ GUARDRAIL

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



	PARTS LIST	1	SPECIFICATIONS
PART NO. 000-0203 006-0595 030-2159 030-2160 030-2161 030-2170 036-1115	PARTS LIST DESCRIPTION CASTING, STRAIGHT BRACKET ENTRANCE PLATE 12' LOWER RAMP DOUBLE WIDE 12' MID RAMP DOUBLE WIDE 12' UPPER RAMP DOUBLE WIDE 12' GUARDRAIL HARDWARE PACKAGE	<b>QTY</b> 4 2 1 1 1 2 1	<ul> <li><u>CASTING, STRAIGHT BRACKET</u>: A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating.</li> <li><u>ENTRANCE PLATE</u>: 7 GA HR steel. PVC coated after fabrication.</li> <li><u>12' LOWER RAMP DOUBLE WIDE</u>: 12' MID RAMP DOUBLE WIDE; 12' UPPER RAMP DOUBLE WIDE: One piece all welded construction consisting of 12 GA surfaces and 7 GA gussets. PVC coated after fabrication.</li> <li><u>12' GUARDRAIL</u>: One piece all welded construction</li> </ul>
			consisting of 1.315" OD x 14 GA & 1.900" OD x 11 GA galvanized steel tubing and 12 GA. Finished with a baked on powder coating.
			washers and aluminum rivets with 302 stainless steel pin.
	vare package(s) may include extra hardw ecessary for this installation.	/are	SHIPPING WEIGHT: 776 LBS.

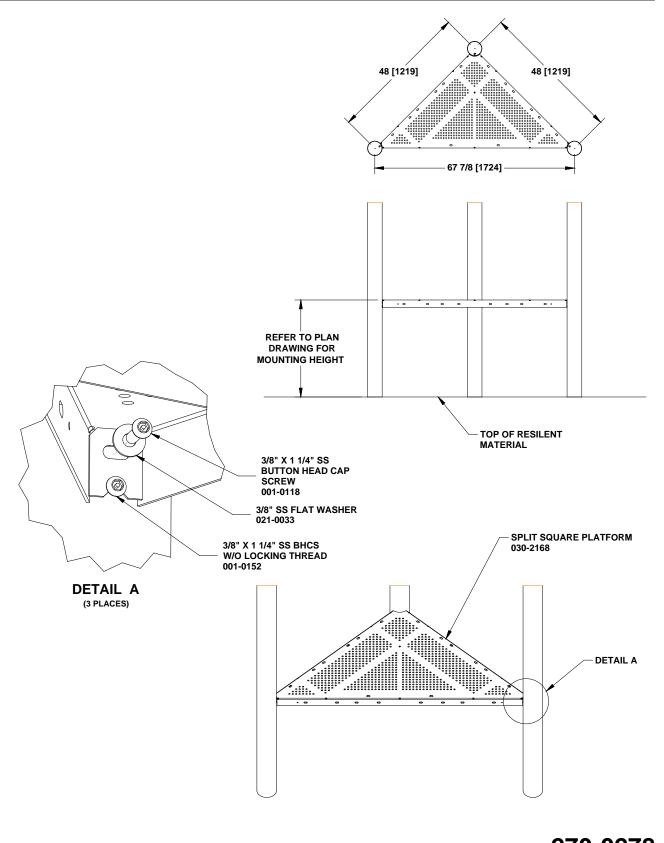
#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of 12" rise ramp.
- 2. Partially thread a 3/8" x 1 ¼" 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 B.
- 3. Slide the two corners of the 12" UPPER RAMP DOUBLE WIDE onto the partially threaded cap screws on each post.
- 4. Place a temporary support underneath the unfastened section of the ramp.
- Attach 12" UPPER RAMP DOUBLE WIDE to 5" OD post using 3/8" X 1 1/4" SS button head cap screws, 3/8" SS washers. See DETAIL B.
- 6. Attach 12" MID RAMP DOUBLE WIDE to 12" UPPER RAMP DOUBLE WIDE using 3/8" X 1" SS button head cap screws, 3/8" SS NUT, and 3/8" SS WASHER. See SECTION D D.
- 7. Attach 12" LOWER RAMP DOUBLE WIDE to 5" OD post by repeating steps 2, 3, 4 and using 3/8" X 1 1/4" SS button head cap screws, 3/8" SS washers. See DETAIL B. Additionally attach 12" LOWER RAMP DOUBLE WIDE to 12" MID RAMP DOUBLE WIDE using 3/8" X 1" SS button head cap screws, 3/8" SS NUT, and 3/8" SS WASHER. See SECTION D D.
- 8. Sleeve CASTING, STRAIGHT BRACKET onto ends of 12' GUARDRAIL and attach to 5" OD posts using 3/8" X 1" SS button head cap screws and 5/16" SS washers. See DETAIL A.
- Attach 12' GUARDRAIL to 12' LOWER, MID and UPPER ramps using 3/8" X 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. See SECTION E - E.
- 10. Attach ENTRANCE PLATE to 12" LOWER RAMP DOUBLE WIDE using 3/8" X 1" SS button head cap screws 3/8" SS NUT and 3/8" SS washers. See SECTION C C.
- 11. Tighten all hardware.
- 12. Drill 1/4" hole through castings and 12' GUARDRAIL using the dimple in the casting as a drill point. See DETAIL A.
- 13. Drive 1/4" rivet into hole. See DETAIL A.

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

270-0272.doc Description: DBLE WIDE RAMP 12" RISE ENTRANCE W/ GUARDRAIL REV: 02 PCN: 13-0299 1/14/2014





270-0278 SINGLE SPLIT SQUARE PLATFORM 62"

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

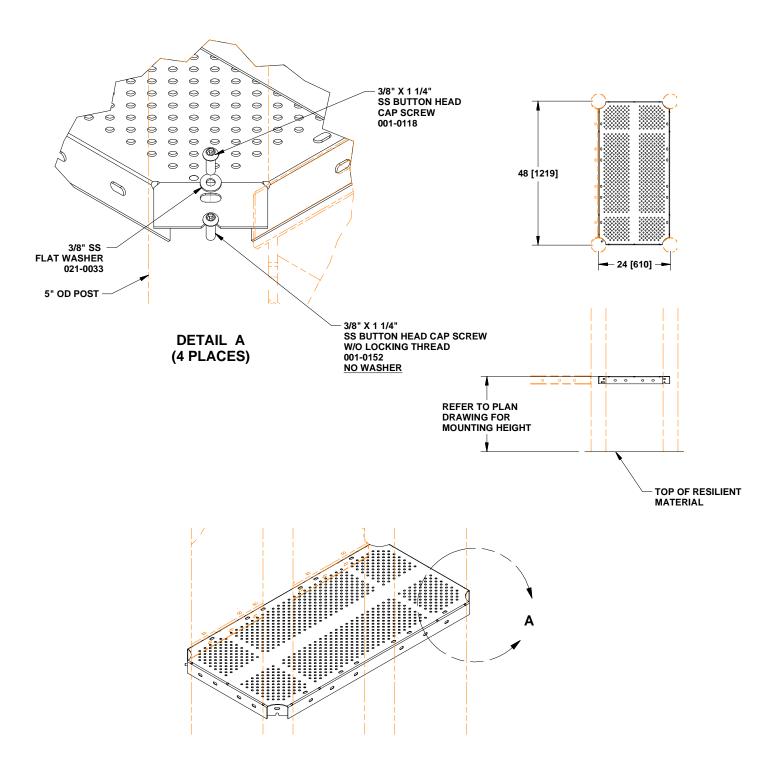
PART NO. 030-2168 036-1100	PARTS LIST DESCRIPTION SPLIT SQUARE PLATFORM HARDWARE PACKAGE	<u>QTY</u> 1 1	SPECIFICATIONS SPLIT SQUARE PLATFORM: 12 GA HRPO sheet, finished with a PVC Coating HARDWARE PACKAGE: Stainless steel
Note: Hardv that is not n	ware package(s) may include extra ha ecessary for this installation.	rdware	SHIPPING WEIGHT: 48 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.
- 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.





	PARTS LIST =		SPECIFICATIONS
PART NO.	DESCRIPTION	QTY	HALF PLATFORM: 12 GA HRPO sheet, finished with a PVC
NOTE: Ha	HALF PLATFORM HARDWARE PACKAGE		HARDWARE PACKAGE: Stainless steel SHIPPING WEIGHT: 56.6 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 four corners of the SQUARE PLATFORM onto the partially threaded cap screws on each post.

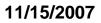
4. Complete attaching platform to posts by using 3/8" x 1 1/4" SS button head cap screws and 3/8" SS flat washers to secure platform into upper mounting hole. See DETAIL A.

5. Level platform and plumb posts.

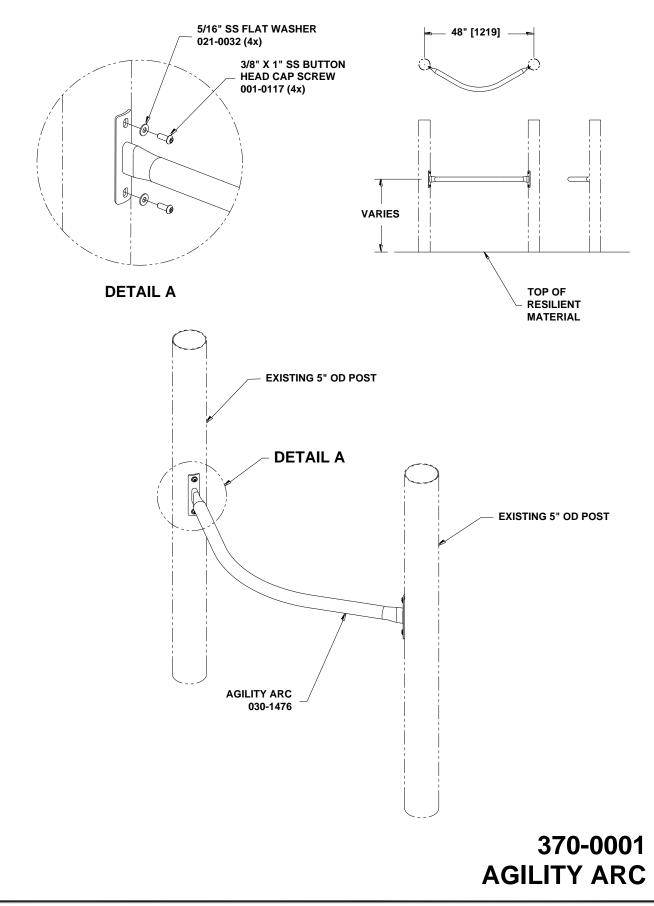
6. Tighten all hardware.

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

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



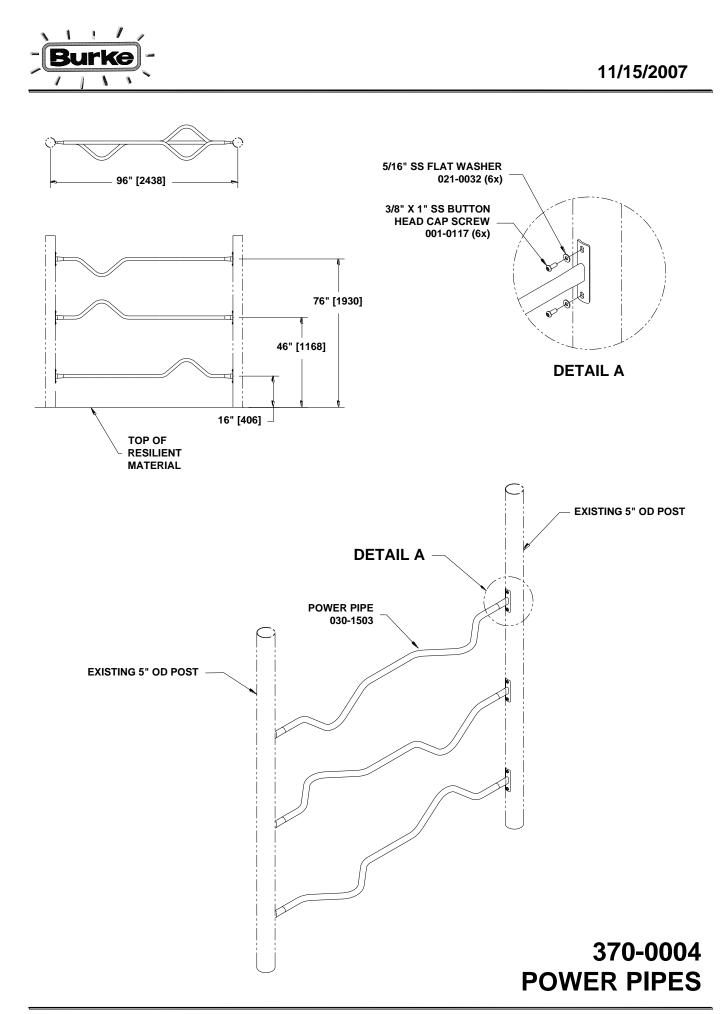




	— PARTS LIST —		SPECIFICATIONS
PART NO. 030-1476 036-0258	PARTS LIST DESCRIPTION AGILITY ARC HARDWARE PACKAGE	<u>QTY</u> 1 2	SPECIFICATIONS AGILITY ARC: One piece all welded construction consisting of formed 1.900" OD x 11 GA and 7 GA stainless steel sheet. Finished with a baked on powder coating. HARDWARE PACKAGE: Stainless steel.
	are package(s) may include extr ecessary for this installation.	a hardware	SHIPPING WEIGHT: 12 LBS.

- 1. Attach AGILITY ARC 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.

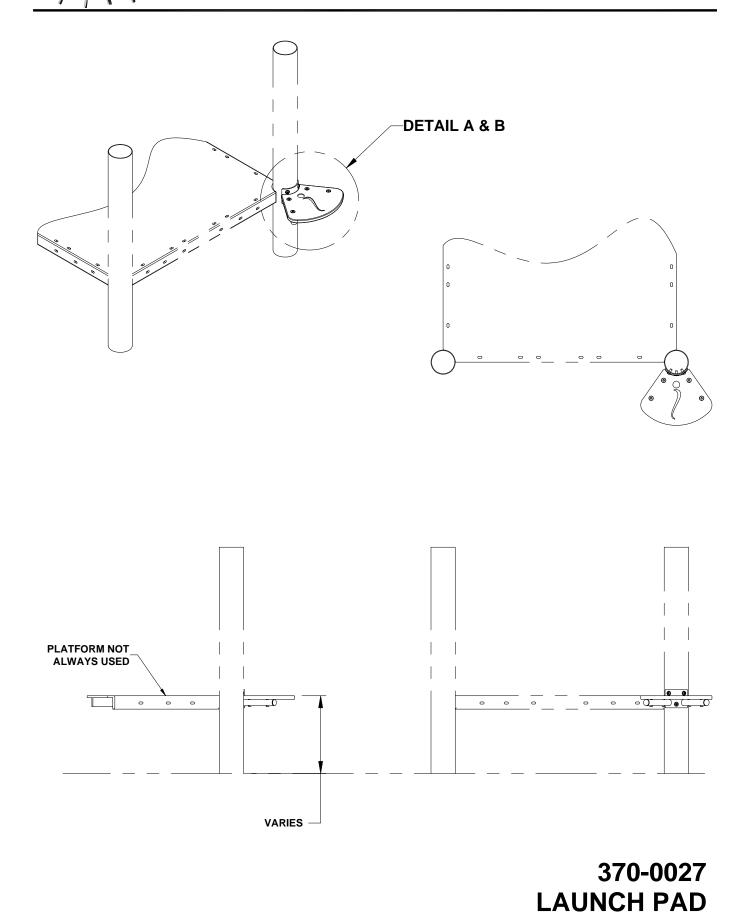
370-0001.doc Description: AGILITY ARC REV: 00 PCN: 07-0013 11/15/2007



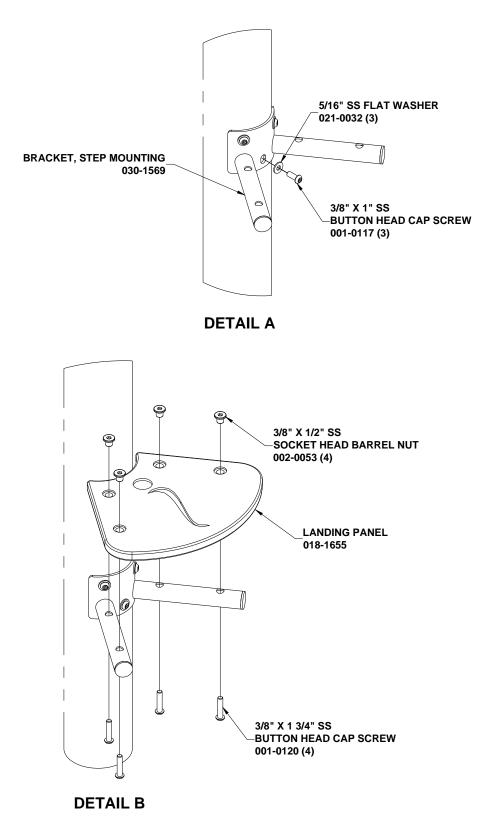
	— PARTS LIST —		SPECIFICATIONS
PART NO. 030-1503 036-0258	PARTS LIST DESCRIPTION POWER PIPE HARDWARE PACKAGE	<u>QTY</u> 3 6	SPECIFICATIONS         POWER PIPE: One piece all welded construction consisting of formed 1.600" OD x 12 GA galvanized steel tubing and 7 GA stainless steel sheet. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel.
Note: Hardw that is not no	vare package(s) may include extr ecessary for this installation.	a hardware	SHIPPING WEIGHT: 48 LBS.

- 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







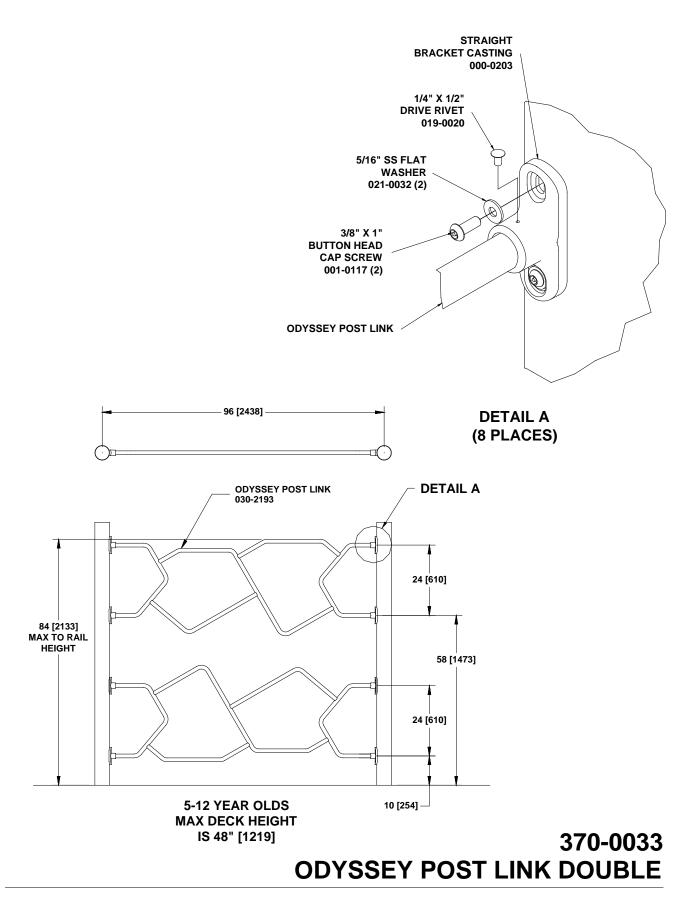


	— PARTS LIST —		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	LANDING PANEL: 3/4" co-extruded HDPE.
018-1655 030-1569 036-0258 036-1014	LANDING PANEL BRACKET, STEP MOUNTING HARDWARE PACKAGE HARDWARE PACKAGE	1 2 1	<ul> <li><u>BRACKET, STEP MOUNTING</u>: One piece all welded construction consisting of 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.</li> <li><u>HARDWARE PACKAGE</u>: Stainless steel.</li> <li><u>HARDWARE PACKAGE</u>: Stainless steel button head cap screws, washers, &amp; barrel nuts .</li> </ul>
	vare package(s) may include extra hat ecessary for this installation.	ardware	SHIPPING WEIGHT: 10 LBS.

- 1. Attach STEP MOUNTING BRACKET to post using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- 2. Attach LANDING PANEL to Step Mounting Bracket using 3/8" x 1 3/4" SS button head cap screws. See DETAIL B.
- 3. Plumb and level components. Tighten all hardware.
- 4. INSTALL RESILIENT SURFACING MATERIAL IN ACCORDANCE TO INSTALLATION GUIDELINES.



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

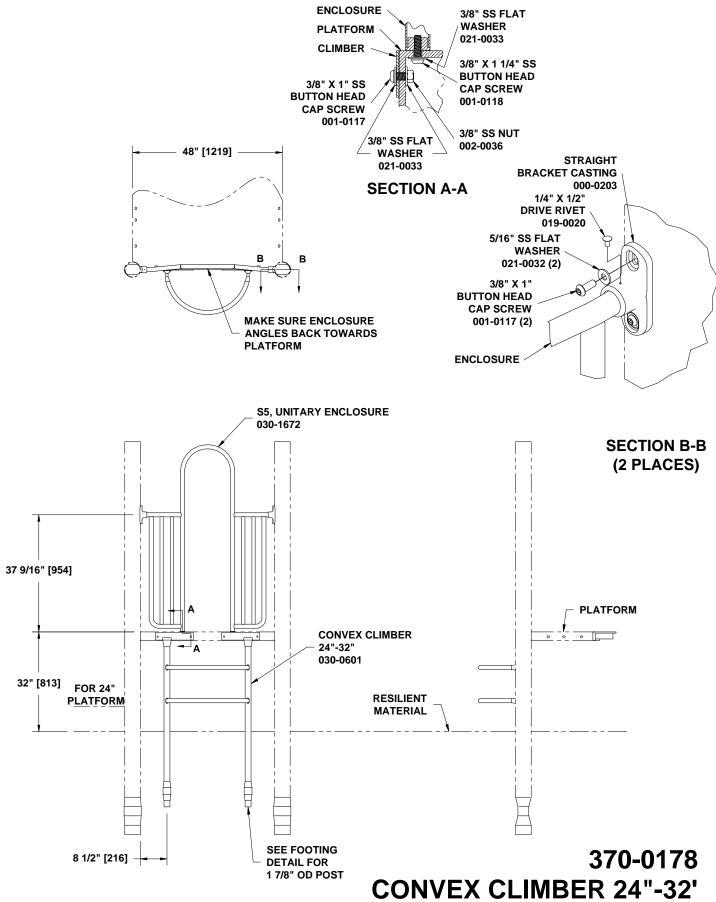


	PARTS LIST		Г	SPECIFICATIONS
PART NO. 000-0203 030-2193 036-0258 036-0819	DESCRIPTION CASTING, STRAIGHT BRACKET ODYSSEY POST LINK HARDWARE PACKAGE HARDWARE PACKAGE	<u>QTY</u> 8 2 8 4		SPECIFICATIONS CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating. ODYSSEY 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.

- 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 Burke

11/5/2010



PARTS LIST		SPECIFICATIONS
PARTS LISTPART NO.DESCRIPTION000-0203CASTING, STRAIGHT BRACKET030-0601CONVEX CLIMBER 24"-32"030-1672S5 UNITARY ENCLOSURE036-0018HARDWARE PACKAGE036-0819HARDWARE PACKAGE	QTY 2 1 1 1	<ul> <li><u>CASTING, STRAIGHT BRACKET</u>: A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating.</li> <li><u>CONVEX CLIMBER 24"-32"</u>: One piece all welded construction consisting of 1.315" OD x 14 GA &amp; 1.900" OD x 11 GA galvanized steel tubing, and 10 GA galvanized steel plate. Finished with a baked on powder coating.</li> <li><u>S5 UNITARY ENCLOSURE</u>: One piece all welded construction consisting of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14 GA galvanized steel tubing, and HDPE threaded inserts. Finished with a baked on powder coating.</li> </ul>
Note: Hardware package(s) may include extra hard that is not necessary for this installation.	ware	HARDWARE PACKAGE: Stainless steel screws, washers and nuts. HARDWARE PACKAGE: Aluminum Rivets SHIPPING WEIGHT: 77 LBS.

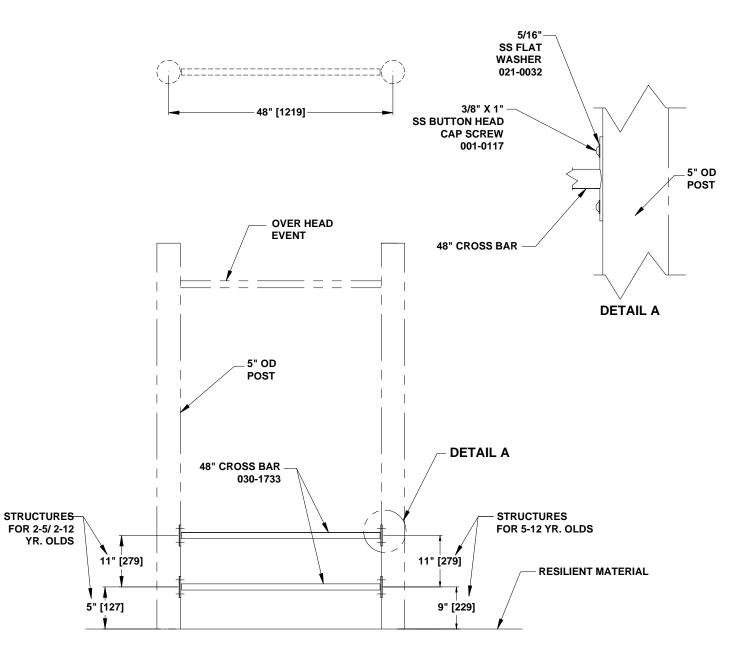
<u>NOTE:</u> Plastisol coating may need to be removed from mounting holes on platform before installing this climber. NOTE: Make sure enclosure angles back towards platform. (See Top View)

- 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. Locate mounting holes for UNITARY ENCLOSURE on 5" O.D. posts.
- Set CASTING, S5, STRAIGHT BRACKET onto ends of UNITARY ENCLOSURE. Position unitary enclosure with brackets into opening. Install 3/8" x 1" BUTTON HEAD CAP SCREWS and 5/16" WASHERS through upper holes of brackets and into 5" O.D. posts. See SECTION B-B.
- 4. Rotate unitary enclosure up 90 degrees and install 3/8" x 1" BUTTON HEAD CAP SCREWS and 5/16" WASHERS into bottom holes of bracket. See SECTION B-B. Tighten all hardware.
- 5. Rotate unitary enclosure down to align holes in platform with unitary enclosure nutserts.
- 6. Attach unitary enclosure to platform using 3/8" x 1 1/4" BUTTON HEAD CAP SCREWS and 3/8" WASHERS. See SECTION A-A. Tighten bolts.
- 7. Drill 1/4" diameter holes through pilot hole in casting and into unitary enclosure. See SECTION B-B.
- 8. Drive rivets flush with brackets and handrails.
- 9. Tighten all hardware.
- 10. Position CONVEX CLIMBER into footing hole.
- 11. Attach CONVEX CLIMBER to platform using 3/8" x 1" BUTTON HEAD CAP SCREWS, 3/8" WASHERS and 3/8" NUTS. See Section A-A. Tighten all hardware.
- 12. Block-up and plumb.
- 13. Pour concrete and allow concrete to set for 2-3 days.

370-0178.doc Description: CONVEX CLIMBER 24"-32" REV: 01 PCN: 10-0270 11/5/2010

14. Install resilient surfacing material.



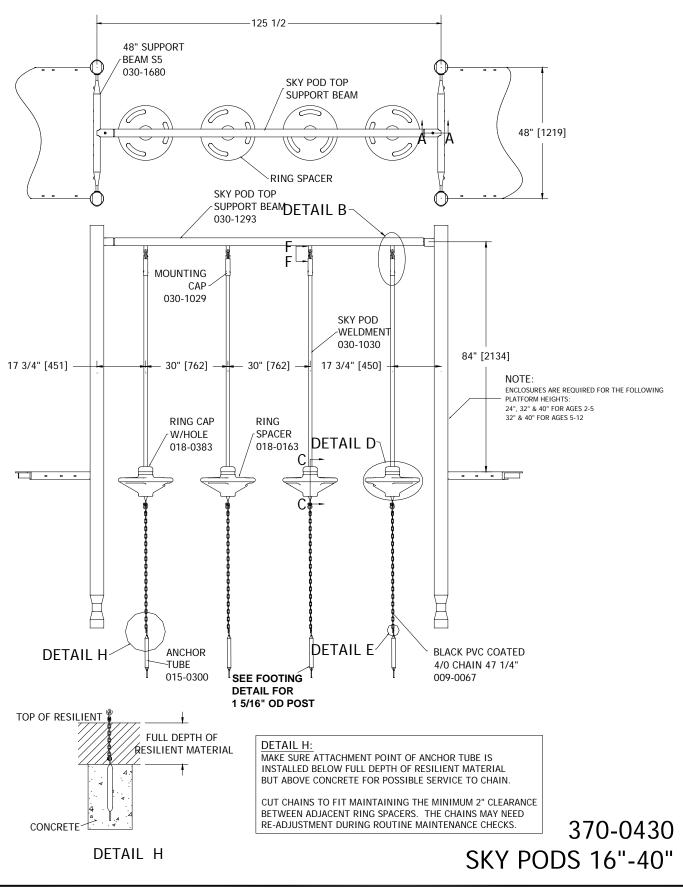




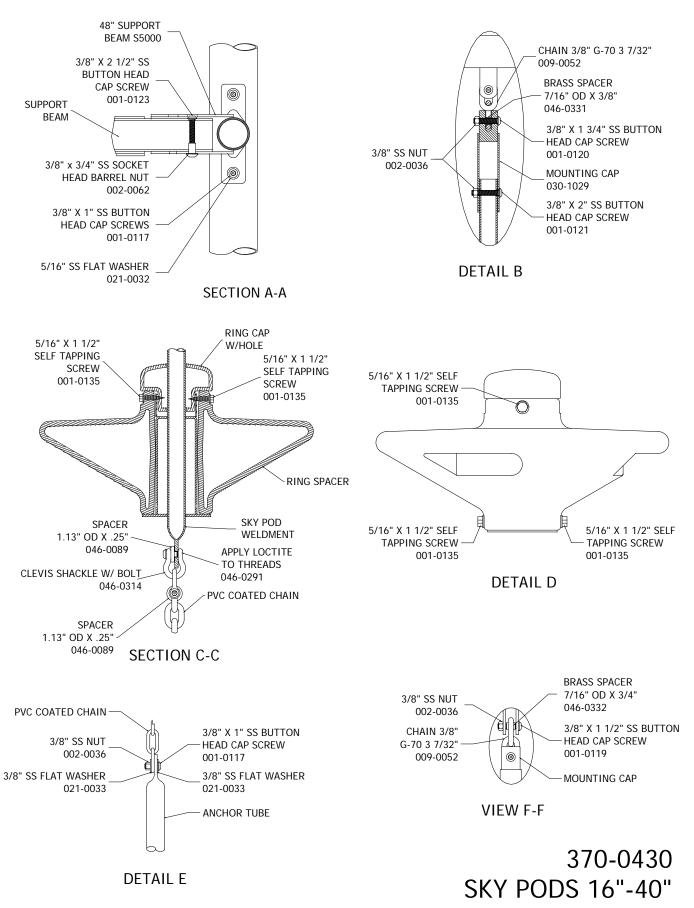
	PARTS LIST		SPECIFICATIONS		
PART NO. 030-1733 036-0258	PARTS LIST <u>DESCRIPTION</u> 48" CROSS BAR HARDWARE PACKAGE	QTY 2 4	SPECIFICATIONS <u>48" CROSS BAR</u> : One piece all welded construction consisting of 1.315" OD, 14 GA galvanized steel tubing and 7 GA stainless steel plate. Finished with a baked 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.









	PARTS LIST		
PART NO.	DESCRIPTION	QTY	CHAIN 3/8" G-70 3 7/32": 3/8" chain, yellow dichromate finish.
			BLACK PVC COATED 4/0 CHAIN 47 1/4": Galvanized 4/0 straight coil chain with Black PVC coating.
009-0052	CHAIN 3/8" G-70 3 7/32"	4	ANCHOR TUBE : 1.315" OD x 12 GA galvanized steel tubing.
009-0067	BLACK PVC COATED 4/0 CHAIN 47 1/4"	4	RING SPACER: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction and a textured surface.
015-0300	ANCHOR TUBE	4	RING CAP W/HOLE: Linear, low density rotationally molded, U.V. stabilized, polyethylene, .250" thick, single
018-0163	RING SPACER	4	wall construction. Textured outside surface.
018-0383	RING CAP W/HOLE	4	MOUNTING CAP: One piece all welded construction consisting of 1018 HR steel and 1 9/16" OD x 13 GA CRS DOM tubing. Finished with a baked on powder coating.
030-1029	MOUNTING CAP	4	
030-1030	SKY POD WELDMENT	4	SKY POD WELDMENT: One piece all welded construction consisting of 1.315" OD x 12 GA galvanized steel tubing; 3" x 3" x 11 GA 1018 square steel tubing; and 7 GA & 10 GA steel plate. Finished with a baked on
030-1293	SKY POD TOP SUPPORT BEAM	1	powder coating.
030-1680	SUPPORT BEAM 5" POSTS	2 2	SKY POD TOP SUPPORT BEAM: One piece all welded construction consisting of 2 3/8" OD x 10 GA, 2 7/8" OD x 8 GA galvanized steel tubing and 8 GA galvanized steel plate. Finished with a baked on powder coating.
036-0734	HARDWARE PACKAGE	2	SUPPORT BEAM 5" POSTS: One piece all welded construction consisting of 2 3/8" OD x 10 GA & 2 7/8" OD x
036-0771	HARDWARE PACKAGE	2	8 GA galvanized steel tubing, and formed 3/16" stainless steel plates. Finished with a baked on powder coating.
036-0785	HARDWARE PACKAGE	1	HARDWARE PACKAGE: Stainless steel button head cap screws, nuts and flat washers; zinc plated steel hex
036-0788	HARDWARE PACKAGE	4	head cap screws, self tapping screws and lock washers.
036-0828	HARDWARE PACKAGE	1	HARDWARE PACKAGE: Stainless steel screws, nuts, and washers.
046-0089	SPACER 1.13" OD X .25"	8	HARDWARE PACKAGE: Stainless steel screws and washers.
046-0291	LOCTITE	1	HARDWARE PACKAGE: 5/16" Shackle with a 3/8" X 1 5/32" bolt.
046-0331	BRASS SPACER 7/16" OD X 3/8"	4	HARDWARE PACKAGE: Stainless steel.
046-0332	BRASS SPACER 7/16" OD X 3/4"	4	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 3/8"; BRASS SPACER 7/16" OD X 3/4": Brass Tube 7/16" OD X .028" Wall
Note: Hardv	vare package(s) may include extra hardw	are	
	ecessary for this installation.		SHIPPING WEIGHT: 188 LBS.

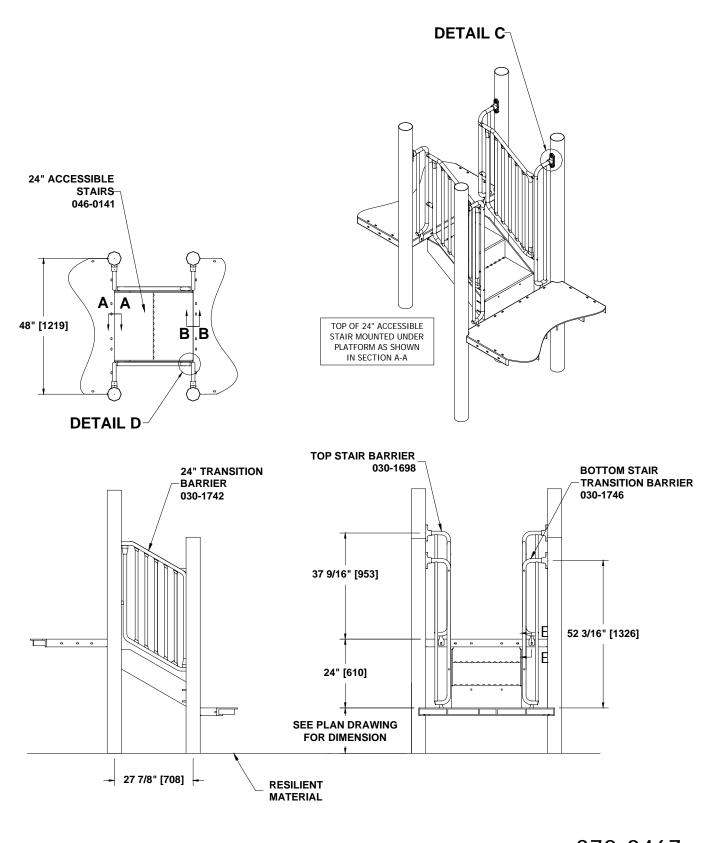
# NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

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

- Dig footing holes per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual. 1.
- 2. Attach first SUPPORT BEAM to posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See SECTION A-A.
- Insert the SKY POD TOP SUPPORT BEAM into the end of the first support beam. See SECTION A-A. 3.
- Sleeve the second support beam over the end of the sky pod top support beam and attach second support beam to posts using 3/8" x 1" SS 4 button head cap screws and 5/16" SS flat washers. Tighten hardware. See SECTION A-A.
- Fasten support beam to sky pod top support beam using a 3/8" x 2 1/2" SS button head cap screw and a 3/8" X 3/4" SS Socket Head Barrel 5. Nut. Tighten hardware. See SECTION A-A.
- Slide ring spacer down into position over sky pod weldments ensuring that the flats on the ring spacers are aligned with the plates on the sky 6. pod weldments. Drill 1/4" holes through ring spacers and sky pod weldments. Insert 5/16" x 1 1/2" self-tapping screws into 1/4" holes and tighten against plastic. NOTE: Do not over tighten to prevent damage. See DETAIL D.
- 7. Slide ring caps into position on ring spacers. Drill 1/4" holes through ring spacers, the plate on the weldments and the ring caps. Insert 5/16" x 1 1/2" self-tapping screws into 1/4" holes and tighten against plastic. See SECTION C-C and DETAIL D.
- 8. Attach 2-link chain to the mounting caps using 3/8" x 1 3/4" SS button head cap screws, 1/2" OD x 3/8" spacers and 3/8" SS nuts. Tighten hardware. See DETAIL B.
- Slide mounting caps onto upper end of sky pod assemblies and attach using 3/8" x 2" SS button head cap screws, and 3/8" SS nuts. Tighten 9 hardware. See DETAIL B.
- 10. Attach sky pod assemblies to the support beam by the 2 link chains. Attach using 1 1/2" SS button head cap screws, 7/16" OD X 3/4" BRASS SPACERS and 3/8" SS nuts. Tighten hardware. See VIEW F-F.
- 11. Assemble clevises and sky pod weldment using the CLEVIS SHACKLE W/ BOLT. Apply LOCTITE to threads before installing. See SECTION C-C.
- 12. Fasten pvc coated chain to 18" tube using 3/8" x 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. Tighten hardware. See DETAIL E. NOTE: See DETAIL H to determine anchor tube attachment point for loose fill and unitary rubber surface. NOTE: Cut chains to fit maintaining the minimum 2" clearance between adjacent ring spacers. The chains may need re-adjustment during routine maintenance checks.
- 13. Verify sky pods are hanging straight down.
- 14. Pour concrete and allow concrete to set for 2-3 days.
- 15. After concrete has set, chains may need re-adjustment to retain the 2" clearance between adjacent ring spacers.
- 16. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines

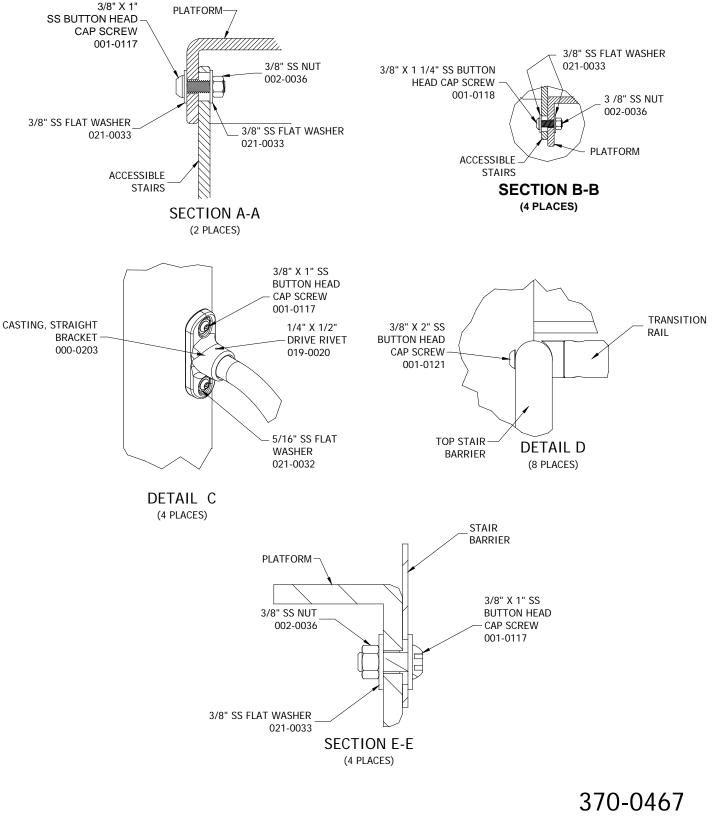
370-0430.doc Description: SKY PODS 16"-40" REV: 03 PCN: 13-0251 11/4/2013





# 370-0467 24" TRANSITION STAIR W/BARRIERS





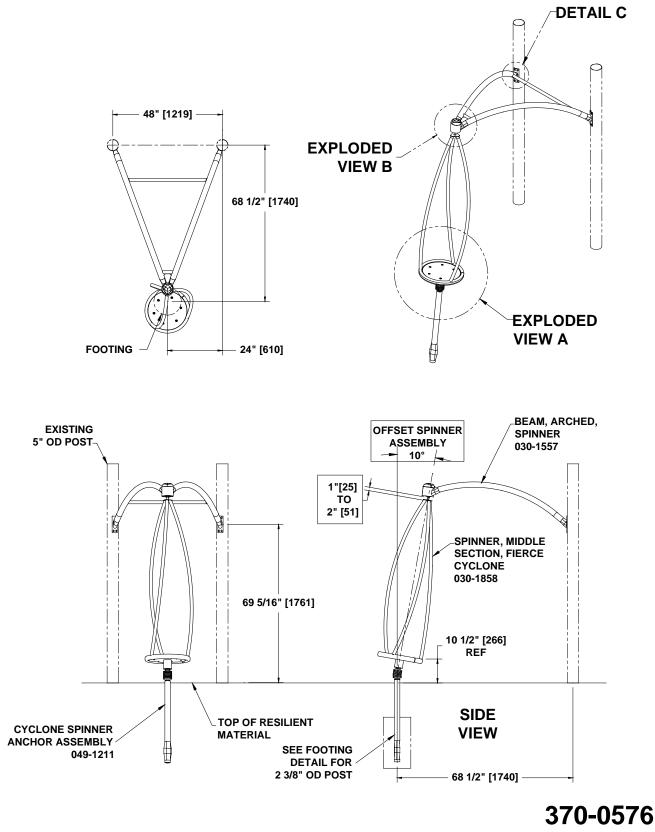
24" TRANSITION STAIR W/BARRIERS

	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat-
000-0203 030-1698	CASTING, STRAIGHT BRACKET TOP STAIR BARRIER	4	Treated. Finished with baked on powder coating.
030-1698	24" TRANSITION BARRIER	2 2 2	TOP STAIR BARRIER: One piece all welded construction
030-1746	BOTTOM STAIR TRANSITION	2	consisting of 1.315" OD x 12 GA & 1.029" OD x 12 GA galvanized steel tubing and 10 GA galvanized steel plate.
036-1125	BARRIER HARDWARE PACKAGE	1	Finished with a baked on powder coating.
046-0141	24" ACCESSIBLE STAIRS	1	
			24" TRANSITION BARRIER: One piece all welded construction consisting of 1.315" OD x 12 GA & 1.029" OD x 12 GA galvanized steel tubing, malleable iron plug and 10 GA galvanized steel plate. Finished with a baked on powder coating.
			BOTTOM STAIR TRANSITION BARRIER: 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 & washers and aluminum rivets with 302 stainless steel pin.
			<u>24" ACCESSIBLE STAIRS</u> : One piece all welded construction consisting of 12 GA HRPO steel surfaces, sides, and gussets. PVC coated after fabrication.
	vare package(s) may include extra hardw ecessary for this installation.	vare	SHIPPING WEIGHT: 161 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.

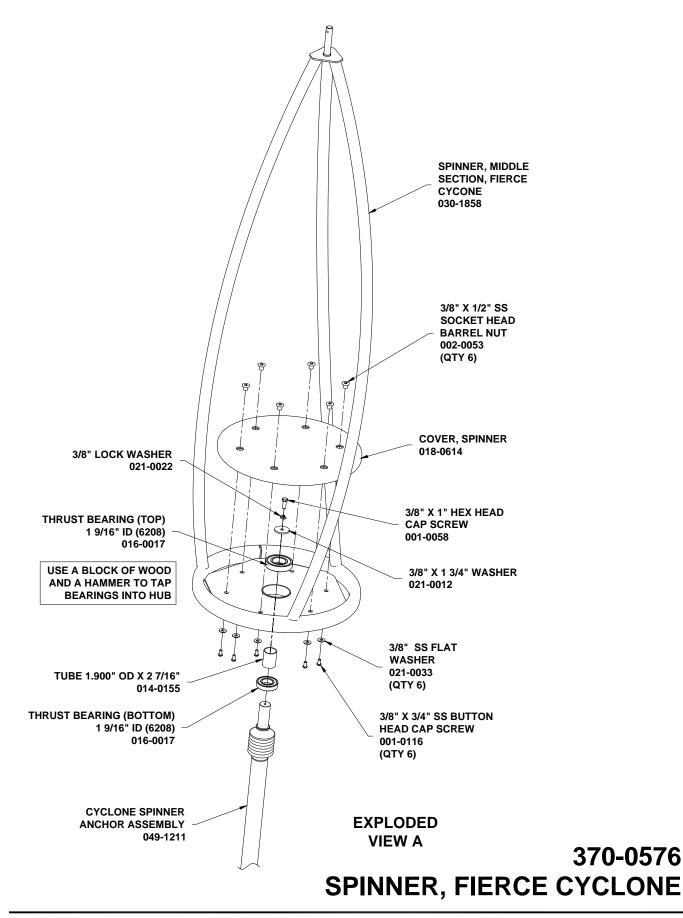
- 1. Install platforms. See appropriate installation instructions.
- Attach 24" ACCESSIBLE STAIRS to upper platform using 3/8" x 1 " SS button head cap screw, 3/8" SS flat washers and 3/8" SS nuts. NOTE: Make sure the stairs are centered between the posts. See SECTION A-A.
- 3. Attach 24" accessible stairs to lower platform using 3/8" x 1 1/4" SS button head cap screw, 3/8" SS flat washers and 3/8" SS nuts. **NOTE: Make sure the stairs are centered between the posts.** See SECTION B-B.
- 4. Attach STRAIGHT BRACKET CASTINGS to 5" OD posts using 3/8" x 1" SS button head cap screws and 5/16" SS washers. See DETAIL C.
- 5. Attach TOP STAIR BARRIER to 24" TRANSITION BARRIER using 3/8" x 2" SS button head cap screws. See DETAIL D.
- Attach BOTTOM STAIR TRANSITION BARRIER to 24" TRANSITION BARRIER using 3/8" x 2" SS button head cap screws. See DETAIL D
- Sleeve TOP STAIR BARRIER and BOTTOM STAIR TRANSITION BARRIER into straight bracket castings. Attach bottom of barriers to platforms using 3/8" x 1" SS button head cap screw, 3/8" SS flat washers and 3/8" SS nuts. See FRONT PAGE of this installation print for orientation. Also see DETAIL C and SECTION E-E.
- 8. Repeat steps 5 thru 7 for the opposite side of the stair.
- 9. Tighten all hardware.
- 10. Drill 1/4" diameter holes thru brackets and barriers. Insert 1/4" diameter drive rivets and pound center pins flush to engage rivets. Apply touch up paint to exposed heads of rivets.
- 11. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



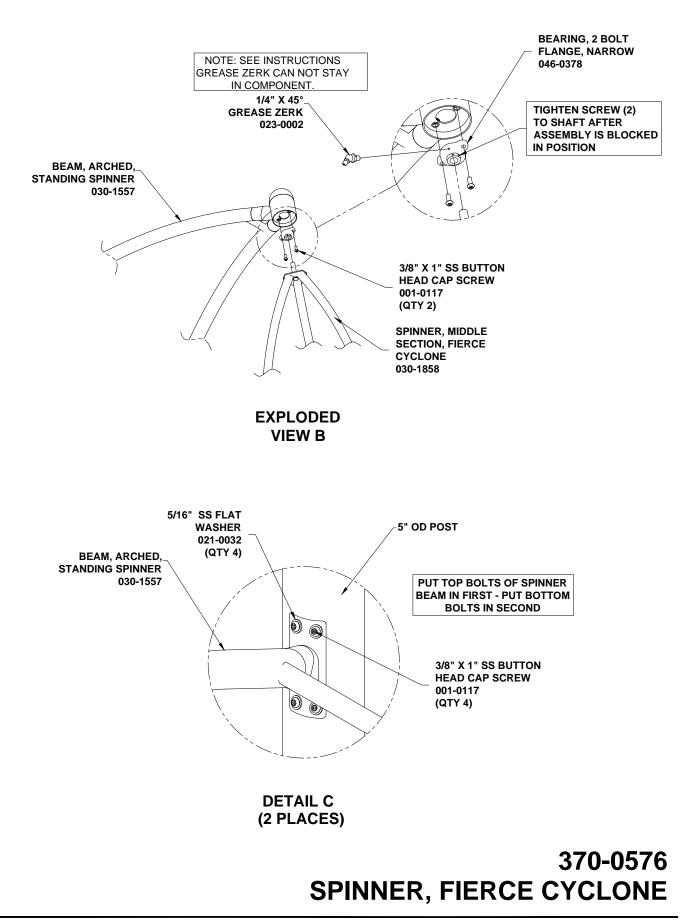


SPINNER, FIERCE CYCLONE









	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	TUBE, 1.900" OD X 11 GA X 2 7/16": 1.900" OD x 11 GA galvanized steel tube.
014-0155	TUBE, 1.900" OD X 11 GA X 2 7/16"	1	THRUST BEARING 1 9/16" ID: Heavy duty, precision thrust, sealed ball
016-0017	THRUST BEARING 1 9/16" ID	2	bearing.
018-0614	COVER, SPINNER	1	COVER, SPINNER: 3/4" extruded HDPE
023-0002	1/4" X 45° GREASE ZERK	1	COVER, SPINNER: 3/4 exiluded HDPE
030-1557	BEAM, ARCHED, SPINNER	1	<u>1/4" X 45° GREASE ZERK</u> : Zinc plated steel.
030-1858	SPINNER, MIDDLE SECTION, FIERCE CYCLONE	1	BEAM, ARCHED, SPINNER: One piece all welded construction consisting of
036-0258	HARDWARE PACKAGE	5	formed 2 3/8" OD x 10 GA & 1.315" OD x 12 GA galvanized steel tubing, and 7 GA stainless steel sheet. Finished with a baked on powder coating.
036-0815	HARDWARE PACKAGE	2 2	
036-1013	HARDWARE PACKAGE	2	SPINNER, MIDDLE SECTION, FIERCE CYCLONE: One piece all welded
046-0378	BEARING, 2 BOLT FLANGE,	1	construction consisting of formed 1.660" OD x 12 GA & 1.315" OD x 12 GA galvanized steel tubing, 3 1/2" OD x 3/8" wall DOM steel tubing and 1/4" HR
	NARROW		steel plate. Finished with a baked on powder coating.
049-1211	CYCLONE SPINNER ANCHOR ASSEMBLY	1	HARDWARE PACKAGE: Stainless steel.
			HARDWARE PACKAGE: Stainless Steel.
			HARDWARE PACKAGE: Stainless steel button head cap screws, washers, & barrel nuts .
			BEARING. 2 BOLT FLANGE. NARROW: PBT Thermoplastic housing, Zinc coated insert, sealed bearing
			<u>CYCLONE SPINNER ANCHOR ASSEMBLY</u> : Assembly consisting of an anchor weldment, rubber boot, malleable iron universal joint, bearings, stainless steel set screws and CF steel shaft.
Note: Hardware package(s) may include extra hardware that is not necessary for this installation.			SHIPPING WEIGHT: 150 LBS.

- 1. Dig footing holes per dimensions shown. See typical concrete footing details for 2 3/8" tubing which are located in the preface of your installation manual.
- 2. Attach STANDING SPINNER ARCHED BEAM to posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL C.
- Remove steel plug from side of 2 BOLT FLANGE BEARING and insert 1/4" X 45° GREASE ZERK to 2 bolt flange bearing. See EXPLODED VIEW B. Add grease as necessary.

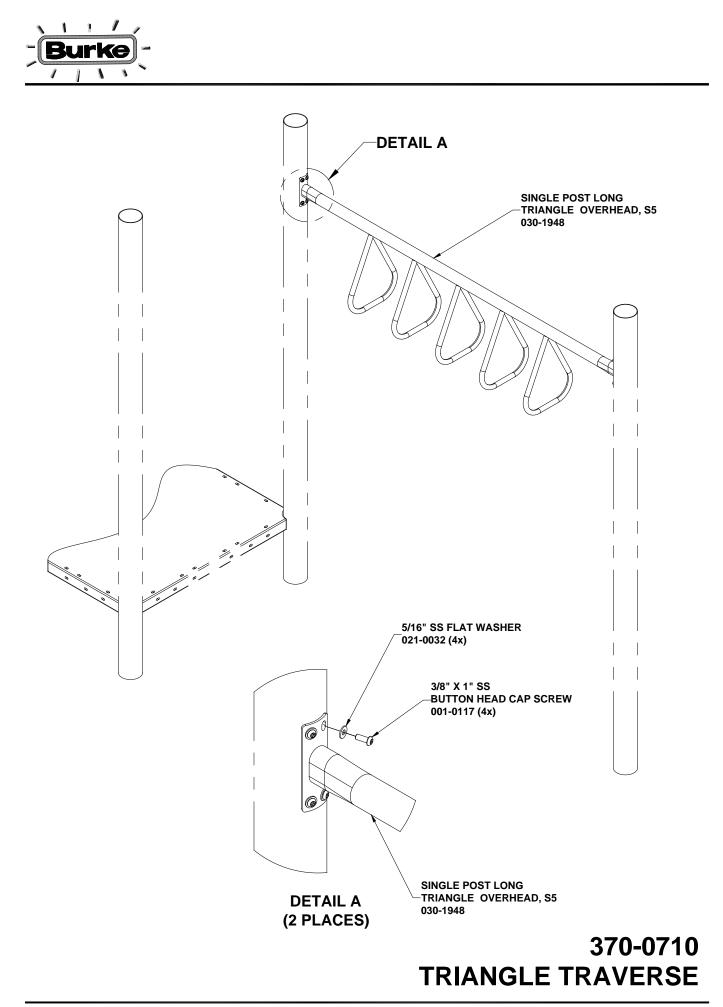
NOTE: Grease zerk is provided so that the Flange Bearing on the Spinner Shaft can be lubricated during periodic maintenance. 1. Remove set screw from hub.

- 2. Screw in grease zerk.
- 3. Insert general purpose grease into grease zerk from hand grease gun.
- 4. Remove grease zerk and re-insert set screw flush with bearing hub surface.

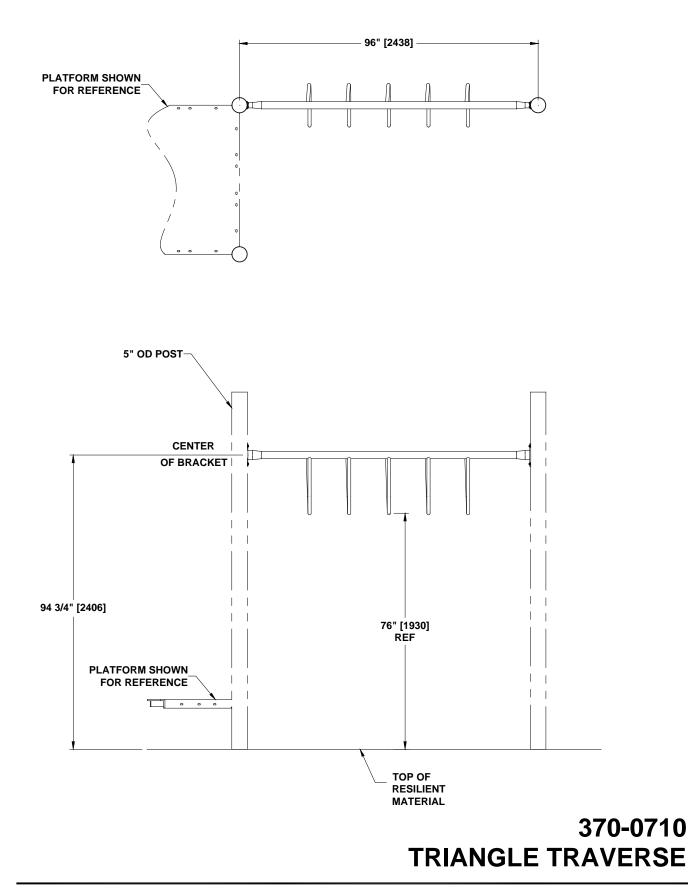
NOTE: Keep grease zerk in a safe place and save for next maintenance period.

- 4. Attach 2 bolt flange bearing to ARCHED BEAM using 3/8" x 1" SS button head cap screws. Tighten hardware. See EXPLODED VIEW B.
- 5. Attach SPINNER MIDDLE SECTION to the CYCLONE SPINNER ANCHOR ASSEMBLY with all the parts in-between. Tighten hardware. See EXPLODED VIEW A.
- 6. Put Anchor section of Spinner Middle Section assembly into the footing hole. Push assembly up so shaft of Spinner Middle Section goes into the Flange Bearing on the Arched Beam. Ensure that there is 1" to 2" of space between Arched Beam and to bar of the Spinner Middle Section. See EXPLODED VIEW B & SIDE VIEW.
- 7. Block up Spinner Middle Section assembly. Ensure there is a 10 degree offset. Tighten set screws. See EXPLODED VIEW B & SIDE VIEW.
- 8. Pour concrete and allow concrete to set for 2-3 days.
- 9. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

370-0576.doc Description: SPINNER, FIERCE CYCLONE REV: 04 PCN: 16-0288 12/29/2016



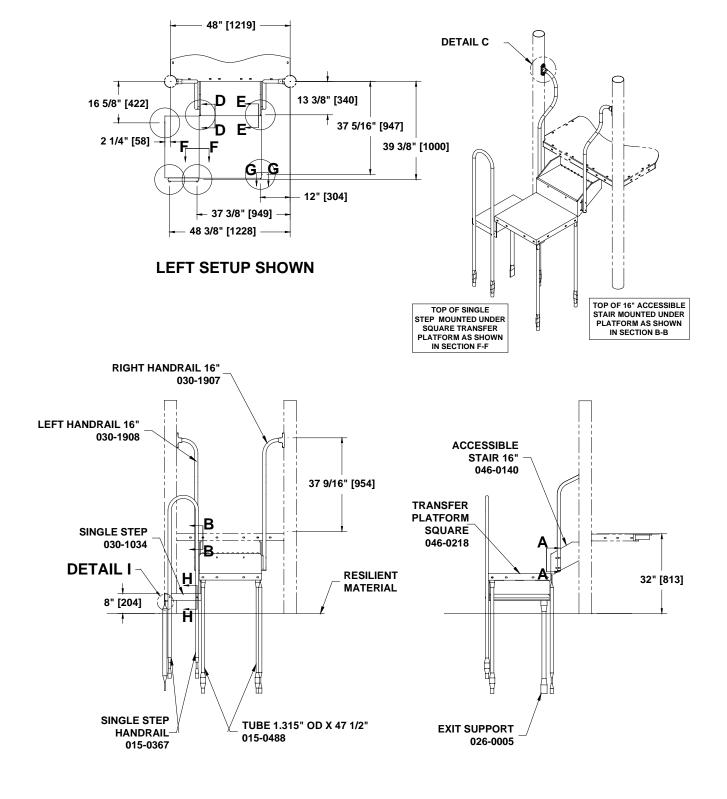




PARTS LIST				
PART NO.	DESCRIPTION	<u>QTY</u>	SINGLE	POST LONG TRIANGLE OVERHEAD, S5: One
030-1948	SINGLE POST LONG TRIANGLE	1	piece all	welded construction consisting of 2.375" x 12 GA,
036-0258	OVERHEAD, S5 HARDWARE PACKAGE	4		D X 14 GA galvanized steel tubing & 7 GA Stainless eet. Finished with a baked on powder coating.
			HARDW	ARE PACKAGE: Stainless steel.
				ALL PACINGE. Glaimess stort.
Note: Hardware package(s) may include extra hardware				
that is not necessary for this installation.		SHIPPING WEIGHT: 41 LBS.		

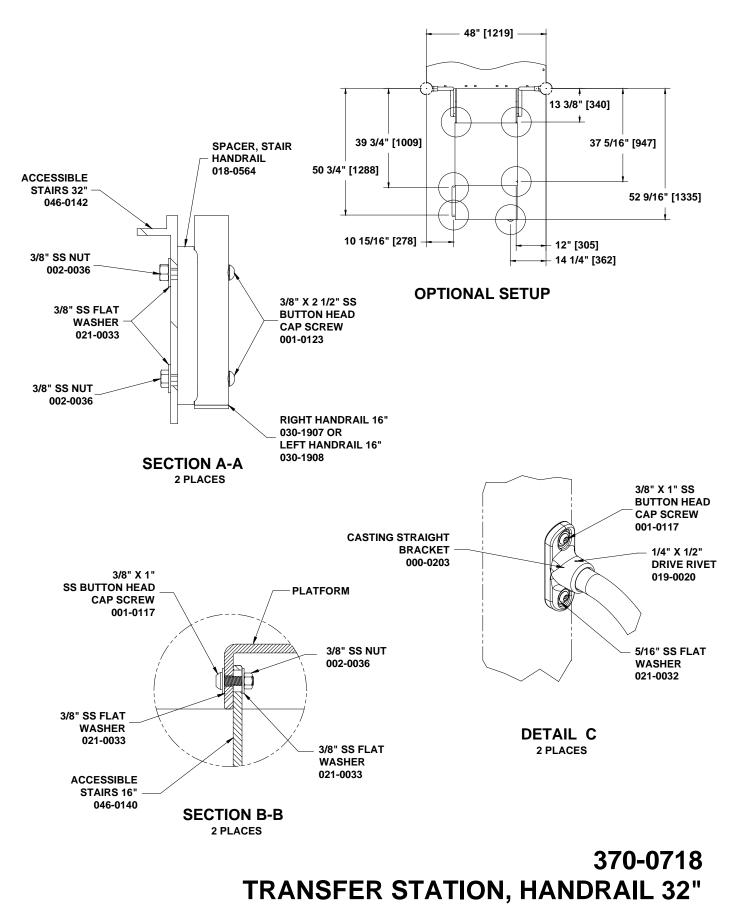
- 1. Attach SINGLE POST LONG TRIANGLE OVERHEAD, S5to posts using 3/8" x 1" SS button head cap screw and 5/16" SS flat washer. See DETAIL A.
- 2. Plumb and level components. Tighten all hardware.
- 3. Pour concrete and let set 2-3 days.
- 4. INSTALL RESILIENT SURFACING MATERIAL IN ACCORDANCE TO INSTALLATION GUIDELINES.

# 370-0718 TRANSFER STATION, HANDRAIL 32"



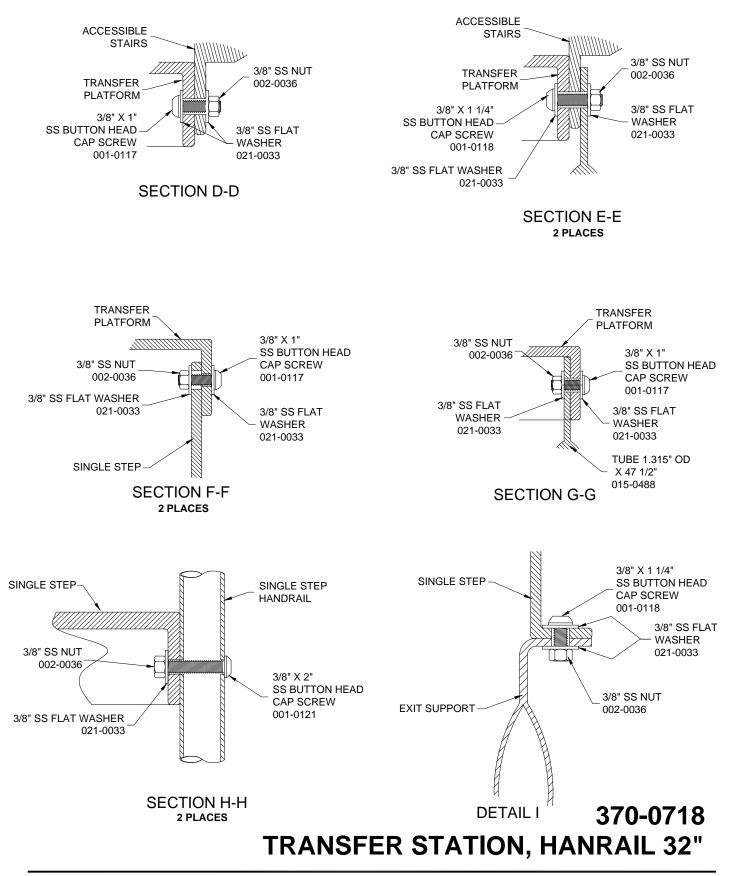






#### BCI Burke Company, LLC P.O. Box 549 Fond du Lac, Wisconsin 54936-0549





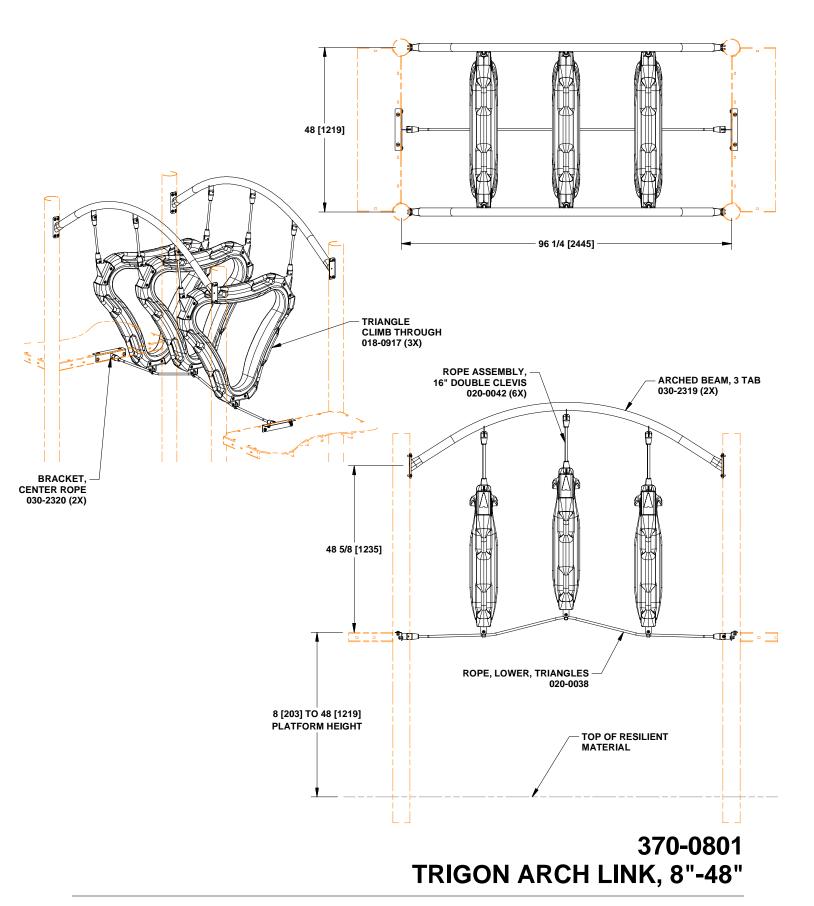
	PARTS LIST	1	SPECIFICATIONS	<u> </u>		
PART NO. 000-0203	DESCRIPTION CASTING, STRAIGHT BRACKET	<u>QTY</u> 2	<u>CASTING, STRAIGHT BRACKET</u> : A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.			
015-0367 015-0488 018-0564	SINGLE STEP HANDRAIL TUBE 1.315" OD X 47 1/2" SPACER, STAIR HANDRAIL	1 3 2	SINGLE STEP HANDRAIL: Formed 1.315" OD x 12 GA galvanized steel tubing finished with a baked on powder coating.	t		
026-0005 030-1034	SUPPORT, EXIT, 37.29" SINGLE STEP	1	TUBE 1.315" OD X 47 $1/2$ ": 1.315" OD x 12 GA galvanized steel tubing finished with a baked on powder coating.			
030-1907 030-1908	RIGHT HANDRAIL 16" LEFT HANDRAIL 16"	1	SPACER, STAIR HANDRAIL: 3/4" extruded HDPE.			
036-1123 046-0140 046-0218	HARDWARE PACKAGE 16" ACCESSIBLE STAIRS SQUARE TRANSFER PLATFORM	1 1 1	SUPPORT, EXIT, 37.29": 1.660" OD x 13 GA galvanized steel tubin finished with a baked on powder coating.	ng		
			SINGLE STEP: One piece all welded construction consisting of 12 GA surfaces and gussets. PVC coated after fabrication.			
			<u>RIGHT HANDRAIL 16"; LEFT HANDRAIL 16"</u> : Formed 1.315" OD 2 12 GA galvanized steel tubing finished with a baked on powder coating.	x		
			HARDWARE PACKAGE: Stainless steel screws, nuts & washers a aluminum rivets with 302 stainless steel pin.	nd		
			<u>16" ACCESSIBLE STAIRS</u> : One piece all welded construction consisting of 12 GA HRPO steel surfaces, sides, and gussets. PVC coated after fabrication.	С		
	vare package(s) may include extra hardw ecessary for this installation.	vare	SQUARE TRANSFER PLATFORM : One piece all welded construction consisting of 12 GA surfaces, gussets, and corners. PVC coated after fabrication. SHIPPING WEIGHT: 163 LBS.			
INSTALLATION INSTRUCTIONS						
	NOTE: PVC coating may need to be removed from mounting holes of parts before installation.					
NOTE. FVC coaling may need to be removed from mounting noies of parts before installation.						

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

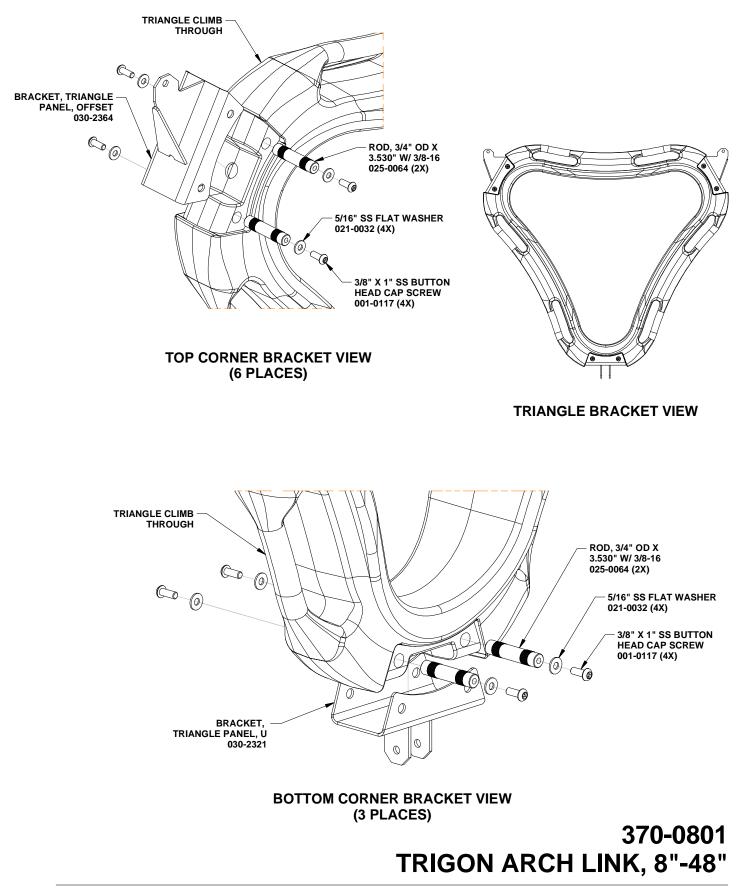
- 1. Install platforms. See appropriate installation instructions.
- 2. Dig footing holes per dimensions shown. See concrete footing drawing for 1.315" OD and 1.660" OD tubing, which is located in the preface of your installation manual.
- Attach TUBES and TRANSFER PLATFORM to 16" ACCESSIBLE STAIRS using 3/8" x 1 1/4" SS button head cap screws with tubes, 3/8" x 1" SS button head cap screws without tubes, 3/8" SS nuts and 3/8" SS flat washers. Refer to SECTION D-D and E-E.
- 4. Attach Tube to Transfer Platform using 3/8" x 1" SS button head cap screw, 3/8" SS nut and 3/8" SS flat washers. Refer to SECTION G-G.
- 5. Attach SINGLE STEP to TRANSFER PLATFORM using 3/8" x 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION F-F.
- Attach EXIT SUPPORT to Single Step using a 3/8" x 1 1/4" SS button head cap screw, 3/8" SS washers and a 3/8" SS nut. See SECTION H-H.
- Attach SINGLE STEP HANDRAIL to side of Single Step using 3/8" x 2" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See DETAIL I. Note: the heads of the button head cap screws must be on the outside of the step assembly.
- 8. Position transfer station assembly into footing holes. Attach Accessible Stair to platform using 3/8" x 1" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. Do not tighten nuts. See SECTION B-B.
- 9. Block-up and level transfer station assembly.
- 10. Attach CASTING STRIGHT BRACKETS to 5" OD posts using 3/8" X 1" SS button head cap screws and 5/16" SS washers. See DETAIL C.
- 11. Sleeve RIGHT AND LEFT HANDRAILS onto brackets. See DETAIL C.
- 12. Attach right and left handrails to Accessible Stairs using STAIR HANDRAIL SPACER, 3/8" x 2 1/2" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. Note: the head of the button head cap screw must be on the outside of the stair. See SECTION A-A.
- 13. Drill 1/4" diameter holes through pilot holes on handrails and into mount brackets. Insert drive rivets and drive flush with handrails. See DETAIL
- 14. Tighten all hardware.
- 15. Pour concrete and allow concrete to set for 2-3 days.
- 16. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

370-0718.doc Description: TRANSFER STATION, HANDRAIL 32" REV: 02 PCN: 14-0013 2/4/2014

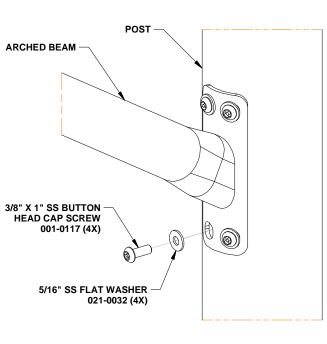






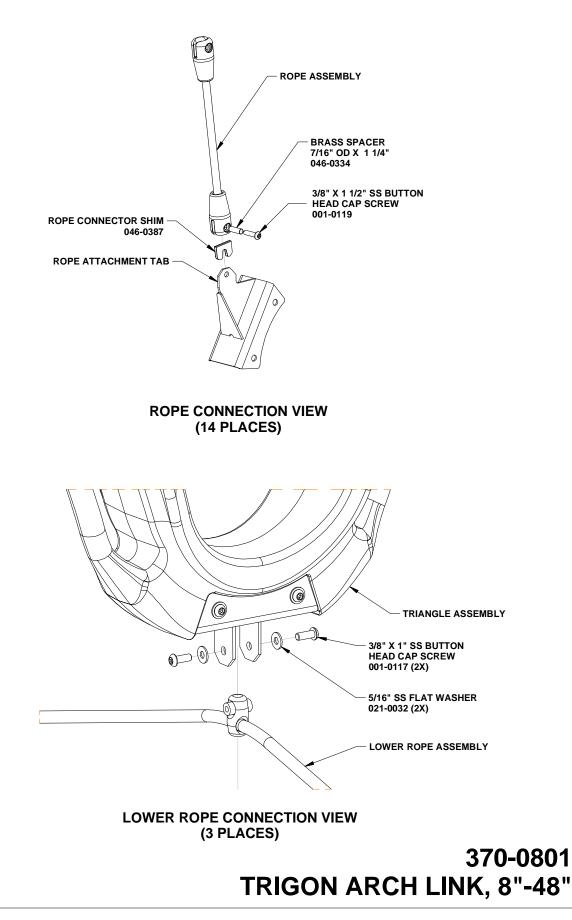


#### **ARCH TO POST VIEW** (4 PLACES) 3/8" X 1" SS BUTTON HEAD CAP SCREW 001-0117 (4X) BRACKET 3/8" SS FLAT WASHER 021-0033 (8X) O R 0 Ð PLATFORM R 0 Ø 6) O Ð ₹ Ø 0) Ô 6) 3/8" SS NUT O 002-0036 (4X) 0 Ø Ø PLATFORM BRACKET VIEW (2 PLACES) 370-0801 **TRIGON ARCH LINK, 8"-48"**









PART N	PARTS LIST           0.         DESCRIPTION         G	<u>YTY</u>			
018-0917	TRIANGLE CLIMB THROUGH	3			
	ROPE, LOWER, TRIANGLES	1			
020-0042	ROPE ASSEMBLY, 16" DOUBLE CLEVIS	6			
	ROD, 3/4" OD X 3.530" W/ 3/8-16	18			
	ARCHED BEAM, 3 TAB	2			
	BRACKET, CENTER ROPE	2			
030-2321	BRACKET, TRIANGLE PANEL, U	3			
030-2364	BRACKET, TRIANGLE PANEL, OFFSET	6			
036-1402	HARDWARE PACKAGE	1			
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	14			
<b>NOTE:</b> Hardware package(s) may include extra hardware that is not necessary for this installation.					

#### **SPECIFICATIONS**

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, LOWER, TRIANGLES</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 end connectors and ferrules with stainless steel threaded rods and screws.

<u>ROPE ASSEMBLY, 16" DOUBLE CLEVIS</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 end connectors and ferrules.

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

ARCHED BEAM, 3 TAB: 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.

BRACKET, CENTER ROPE; BRACKET, TRIANGLE PANEL, U; BRACKET, TRIANGLE <u>PANEL, OFFSET</u>: One piece all welded construction consisting of 8 and 10 GA galvanized steel. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel hardware and black thermoplastic.

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

SHIPPING WEIGHT: 167 LBS.

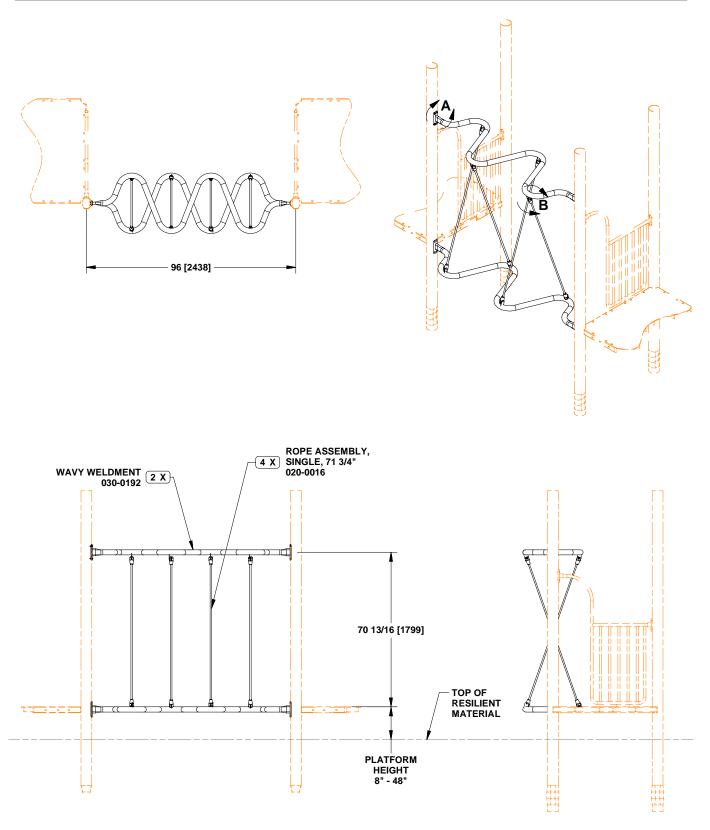
### INSTALLATION INSTRUCTIONS

# NOTE: PVC coating may need to be removed from mounting holes on platform before installing. NOTE: Do not tighten hardware until instructed to do so.

- 1. Press the RODS, 3/4" OD X 3.530" W/3/8-16 into the holes in the TRIANGLE CLIMB THROUGH as shown in TOP CORNER BRACKET VIEW. Press in until flush.
- 2. Install the BRACKET, TRIANGLE PANEL, OFFSET onto the TRIANGLE CLIMB THROUGH using the hardware shown in TOP CORNER BRACKET VIEW. Reference TRIANGLE BRACKET VIEW for bracket orientation.
- 3. Install the BRACKET, TRIANGLE PANEL, U onto the TRIANGLE CLIMB THROUGH using the hardware shown in BOTTOM CORNER BRACKET VIEW. Reference TRIANGLE BRACKET VIEW for bracket orientation.
- 4. Tighten all hardware.
- 5. Install the ARCHED BEAM, 3 TAB to the posts using the hardware shown in ARCH TO POST VIEW. Tighten all hardware.
- 6. Attach the BRACKET, CENTER ROPE to platform using the hardware shown in PLATFORM BRACKET VIEW. Tighten all hardware.
- 7. Install ROPE ASSMEBLY, 16" DOUBLE CLEVIS to the OFFSET TRIANGLE BRACKETS using the hardware shown in ROPE CONNECTION VIEW.
- 8. Hang the rope and triangle assemblies from the arches by connecting the ropes to the tabs on the ARCHED BEAM using the hardware shown in ROPE CONNECTION VIEW.
- 9. Tighten all hardware
- 10. Attach ROPE, LOWER, TRIANGLES to the TRIANGLE U BRACKETS using the hardware shown in LOWER ROPE CONNECTION VIEW.
- 11. Attach LOWER ROPE to CENTER ROPE BRACKETS using hardware shown in ROPE CONNECTION VIEW.
- 12. Tighten all hardware.
- 13. Block up and plumb entire structure.
- 14. Pour Concrete. Allow concrete to set for 2-3 days.

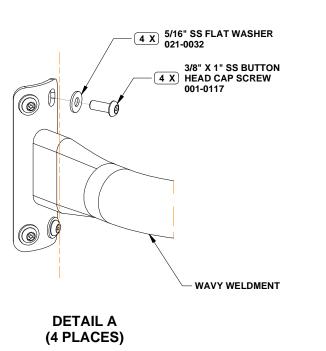
15. Install resilient surfacing material in accordance with installation guidelines, ASTM standards and CPSC guidelines.

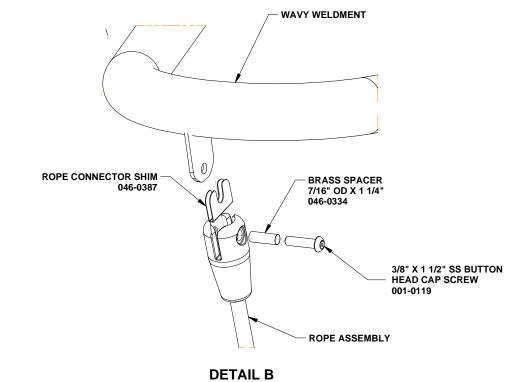




# 370-0808 TWISTING TRAVERSE







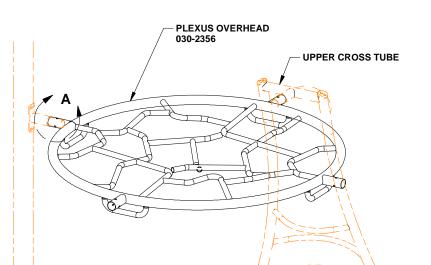
(8 PLACES)

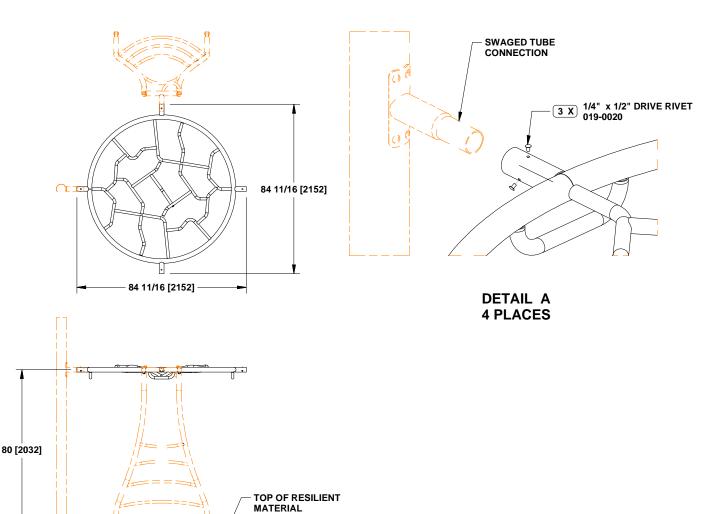
370-0808 TWISTING TRAVERSE

	PARTS LIST		SPECIFICATIONS
PART NO. 020-0016 030-0192 036-0818 036-1311 046-0334	ROPE ASSEMBLY, SINGLE, 71 3/4" WAVY WELDMENT INTENSITY SHIM PACKAGE HARDWARE PACKAGE BRASS SPACER 7/16" OD X 1 1/4"	QTY 4 2 2 3 8	ROPE ASSEMBLY, SINGLE, 71 3/4": 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 end connectors and ferrules with stainless steel screws.         WAVY WELDMENT: All welded constructions consiting of 2.375" OD x 12 GA galvanized steel tubing, 7 GA stainless steel sheet & 8 GA galanized steel sheet. Finished with a baked on powder coating.         INTENSITY SHIM PACKAGE: Black thermoplastic.         HARDWARE PACKAGE: Stainless steel.         BRASS SPACER 7/16" OD X 1 1/4": Brass Tube 7/16" OD X .028" Wall
	ardware package(s) may include extra ha necessary for this installation.	rdware	SHIPPING WEIGHT: 103 LBS.
		-	
NOTE: Do	not tighten hardware until instructed	l to do so.	

- 1. Locate mounting holes for WAVY WELDMENT on posts.
- 2. Attach wavy weldment to posts using hardware specified in DETAIL A.
- 3. Attach ROPE ASSEMBLY, SINGLE, 71 3/4" to wavy weldments using hardware specified in DETAIL B.
- 4. Tighten all hardware.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





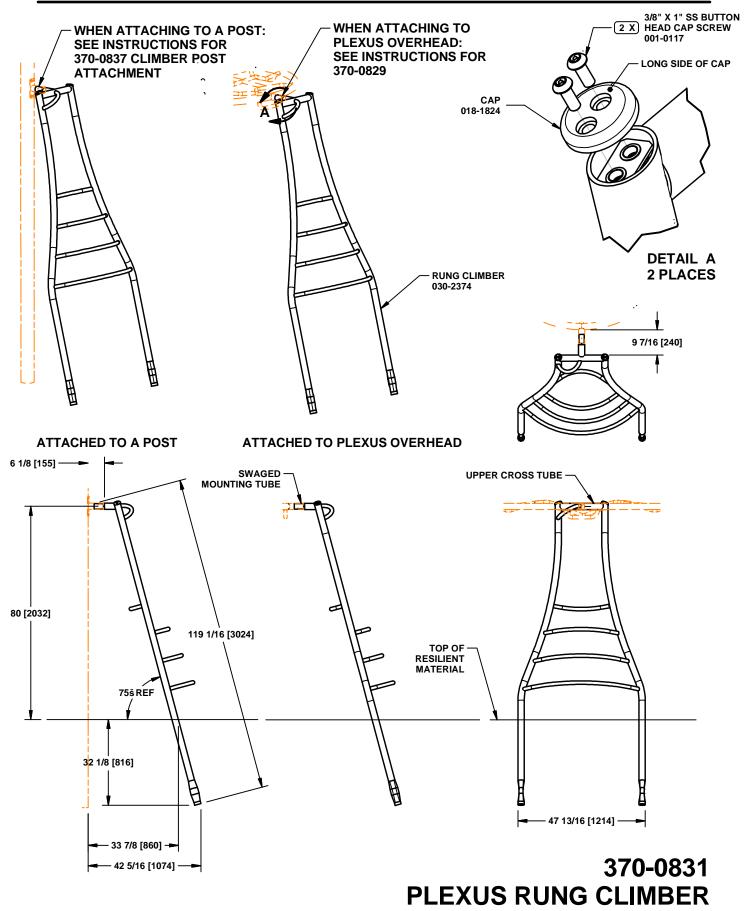




	]	
PARTS LIST		SPECIFICATIONS
PART NO. DESCRIPTION	QTY	PLEXUS OVERHEAD: One piece all welded construction
030-2356 PLEXUS OVERHEAD		consisting of
036-1184 HARDWARE PACKAGE	3	formed 2 3/8" OD x 12 GA & 1.315" OD x 14 GA galvanized
		steel tubing. Finished with a baked on powder coating.
		HARDWARE PACKAGE: Aluminum rivets with stainless
		steel pins.
NOTE: Hardware package(s) may include extra	a hardware	
that is not necessary for this installation.		SHIPPING WEIGHT: 96 LBS.

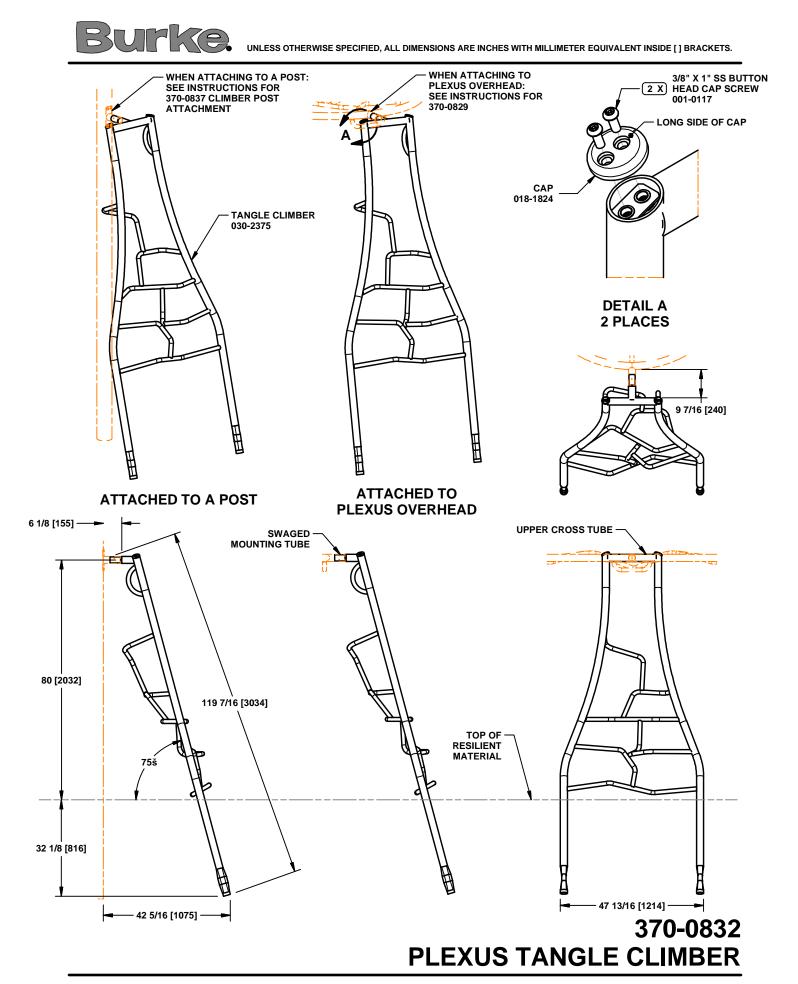
- 1. Determine location of Plexus Overhead and four attached components from site plan.
- Slide the swaged tube connection of the climbers or overhead post bracket into the tube connections of the PLEXUS OVERHEAD. See specific mating component installation instructions for attachment. Make sure the climbers are rotated on the swaged tube connection so that the sides of the climbers are perpendicular and the upper cross tube is horizontal. Make sure the overhead ring is level.
- 4. Once the overhead ring and all climbers or post attachments are in place, install rivets at each of the 4 connection points. Using the 3 holes in each of the 4 connection points of the overhead climber as a guide, drill 1/4" diameter holes through the inner tube. Insert 1/4" drive rivets and pound center pins flush to engage rivets. Apply touch up paint to exposed heads of rivets.
- 5. Pour concrete in footings for components attached to the overhead and let stand for 2 to 3 days.
- 6. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CAP: 3/4" Extruded HDPE
030-2374 036-0258	CAP RUNG CLIMBER HARDWARE PACKAGE	2 1 2	RUNG CLIMBER: Weldment consisting of formed 2.375" OD x 10 GA and 1.315" OD x 12 GA galvanized tubing, 12 GA galvanized steel plate and nut inserts. Finished with a baked on powder coat finish.         HARDWARE PACKAGE: Stainless steel
	rdware package(s) may inclue necessary for this installation.		SHIPPING WEIGHT: 83 LBS.

- 1. Determine location of climber from site plan and dig footing holes accordingly. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Attach CAP(s) to RUNG CLIMBER with hardware specified in DETAIL A. Make sure the long side of the cap is oriented correctly so that it is centered on the opening and completely covers the open tube. Tighten hardware.
- 3. Slide the upper swaged mounting tube of the rung climber into the tube connection of either the Climber Post Attachment bracket or the Plexus Overhead. See specific mating component installation instructions for attachment. Make sure the rung climber is rotated on the swaged tube connection so that the sides of the rung climber are perpendicular and the upper cross tube is horizontal.
- 4. Pour concrete. Let set for two to three days.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

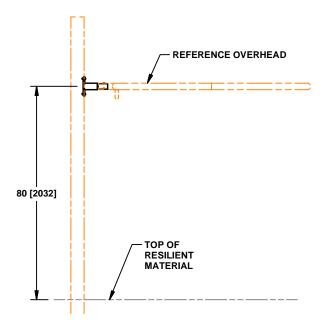


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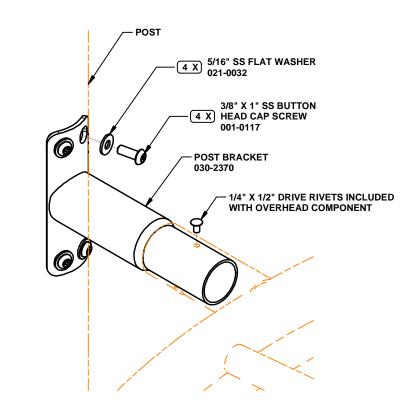
	💳 PARTS LIST 💳		SPECIFICATIONS
SARTNO		0.71/	
PART NO.	DESCRIPTION	<u>QTY</u>	CAP: 3/4" Extruded HDPE
018-1824 CA	λP	2	TANCLE CLIMPED: Woldmont consisting of formed 2 275" OD
030-2375 TA	ANGLE CLIMBER	1	TANGLE CLIMBER: Weldment consisting of formed 2.375" OD x 10 GA and 1.315" OD x 12 GA galvanized tubing, 12 GA
036-0258 HA	ARDWARE PACKAGE	2	galvanized steel plate and nut inserts. Finished with a baked on
			powder coat finish.
			HARDWARE PACKAGE: Stainless steel
NOTE: Hardv	ware package(s) may include e	extra hardware	
that is not nec	cessary for this installation.		SHIPPING WEIGHT: 89 LBS.

- 1. Determine location of climber from site plan and dig footing holes accordingly. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Attach CAP(s) to TANGLE CLIMBER with hardware specified in DETAIL A. Make sure the long side of the cap is oriented correctly so that it is centered on the opening and completely covers the open tube. Tighten hardware.
- 3. Slide the upper swaged mounting tube of the tangle climber into the tube connection of either the Climber Post Attachment bracket or the Plexus Overhead. See specific mating component installation instructions for attachment. Make sure the tangle climber is rotated on the swaged tube connection so that the sides of the tangle climber are perpendicular and the upper cross tube is horizontal.
- 4. Pour concrete. Let set for two to three days.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





**ELEVATION VIEW** 



**ASSEMBLY VIEW** 

### 370-0834 OVERHEAD POST ATTACHMENT

PARTS LIST	SPECIFICATIONS
PARTS LIST PART NO. DESCRIPTION 030-2370 POST BRACKET 036-0258 HARDWARE PACKAGE	SPECIFICATIONS         POST BRACKET: One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and formed 7 GA stainless steel plates. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel.
<u>NOTE:</u> Hardware package(s) may inc that is not necessary for this installation	SHIPPING WEIGHT: 3 LBS.

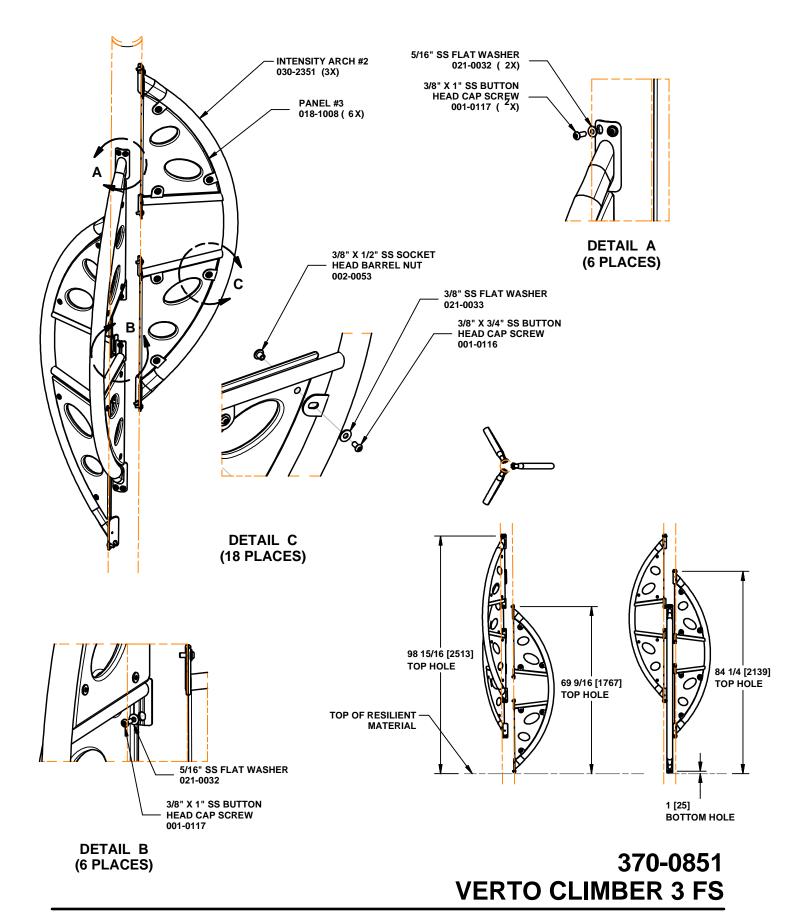
1. Determine location of Overhead Post Attachment from site plan.

2. Attach the POST BRACKET to the post with hardware specified in the assembly view. Slide the tube connection of the overhead onto the swaged portion of the post bracket. See specific overhead installation instructions for attachment. Make sure the overhead component lies on a level horizontal plane in relation to the post.

3. Using the 3 holes in the overhead attachment points as a guide, drill 1/4" diameter holes through the post bracket. Insert 1/4" drive rivets included with overhead component and pound center pins flush to engage rivets. Repeat at applicable remaining overhead attachments. Apply touch up paint to exposed heads of rivets.

4. Install resilient material in accordance with 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>	PANEL #3: 3/4" extruded HDPE.
018-1008         PANEL #3           030-2351         INTENSITY ARCH #2           036-0258         HARDWARE PACKAGE           036-1416         HARDWARE PACKAGE	6 3 3 3	INTENSITY ARCH #2: One piece all welded construction consisting of formed 2 3/8" OD x 10 GA & 1.315 OD x 12 GA galvanized steel tubing, formed 7 GA stainless steel plates, and 10 GA galvanized steel plate. Finished with a baked on powder coating. HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless steel.
<b><u>NOTE</u></b> : Hardware package(s) may include extra hardw that is not necessary for this installation.	vare	SHIPPING WEIGHT: 103 LBS.

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

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

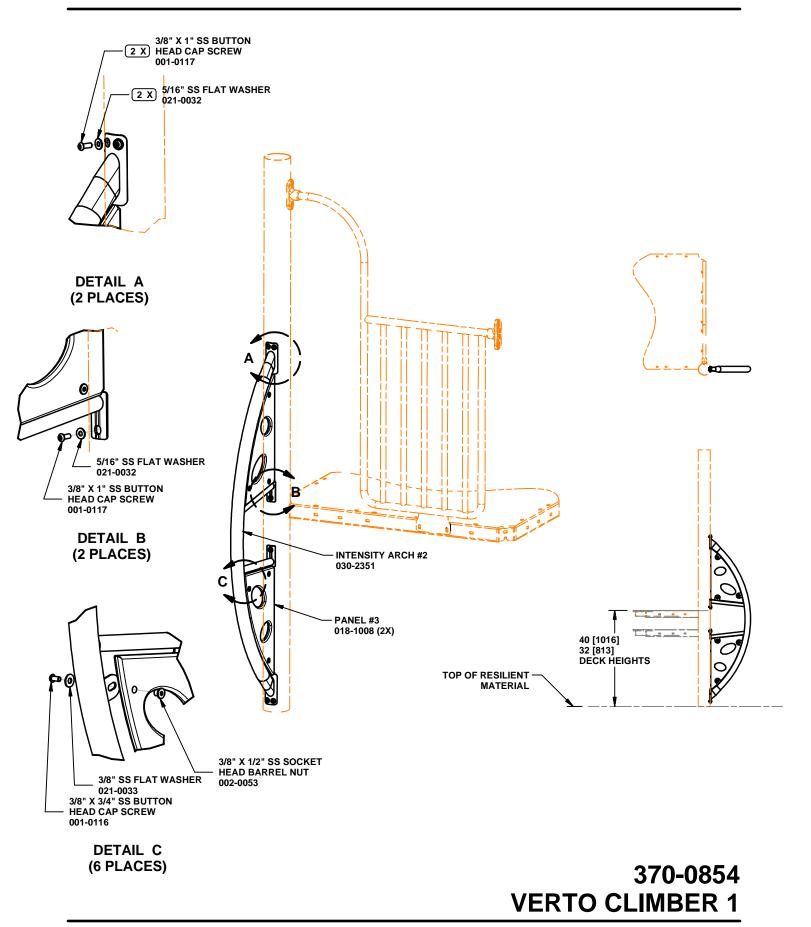
2. Attach INTENSITY ARCH #2 to post using hardware specified in DETAIL A and DETAIL B. Repeat for remaining arches.

3. Attach PANEL #3 to climbers using hardware specified in DETAIL C. Repeat for all panels.

4. Tighten all hardware.

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





PARTS LIST		SPECIFICATIONS
_PART NO	<u>I QTY</u>	PANEL #3: 3/4" extruded HDPE.
018-1008 PANEL #3 030-2351 INTENSITY ARCH #2 036-0258 HARDWARE PACKAGE 036-1416 HARDWARE PACKAGE		INTENSITY ARCH #2: One piece all welded construction consisting of formed 2 3/8" OD x 10 GA & 1.315 OD x 12 GA galvanized steel tubing, formed 7 GA stainless steel plates, and 10 GA galvanized steel plate. Finished with a baked on powder coating. HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless steel.
<b><u>NOTE</u>:</b> Hardware package(s) may inc that is not necessary for this installation		SHIPPING WEIGHT: 35 LBS.

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

1. Locate correct post to assemble arch to from site plan.

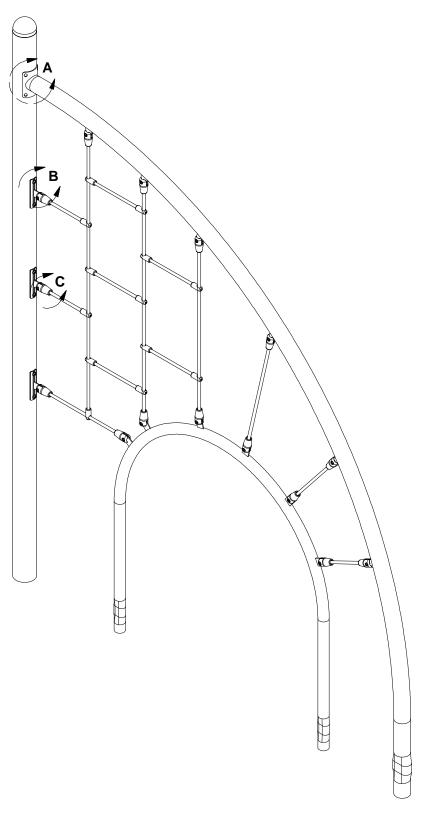
2. Attach INTENSITY ARCH #2 to post using hardware specified in DETAIL A and DETAIL B. Repeat for remaining arches.

3. Attach PANEL #3 to arch using hardware specified in DETAIL C. Repeat for all panels.

4. Tighten all hardware.

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

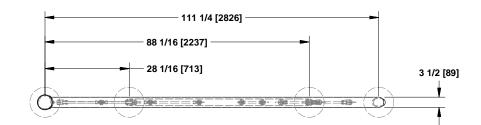


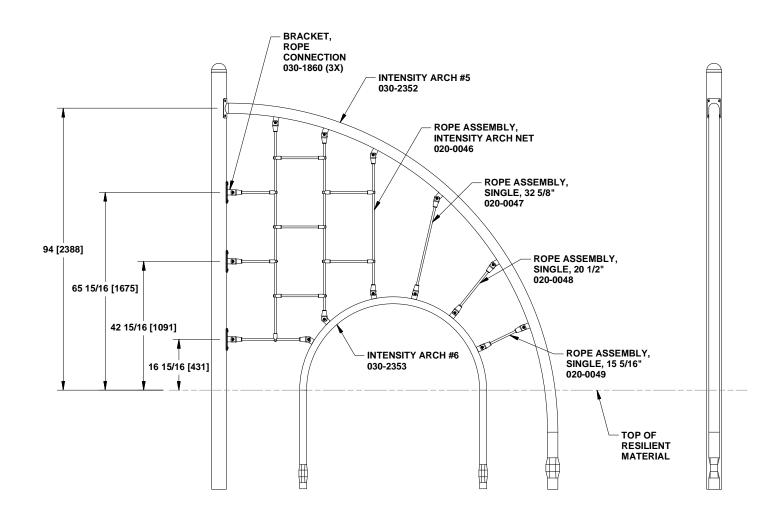


## 370-1583 APEX ROPE CLIMBER

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

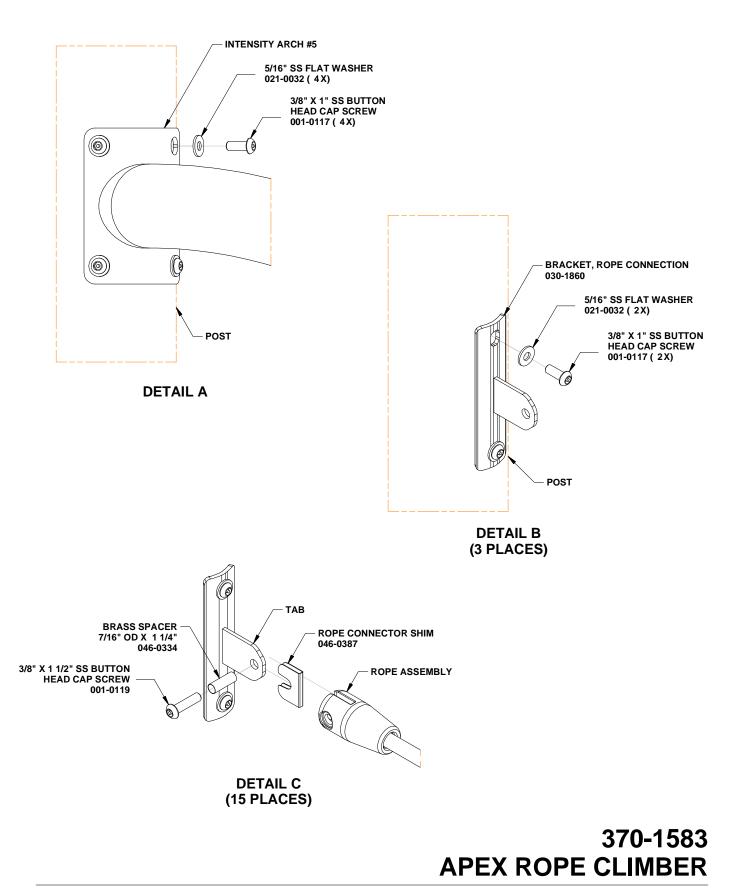






## 370-1583 APEX ROPE CLIMBER





	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	ROPE ASSEMBLY, INTENSITY ARCH NET; ROPE ASSEMBLY, SINGLE
020-0046	ROPE ASSEMBLY, INTENSITY ARCH NET	1	32 5/8"; ROPE ASSEMBLY, SINGLE, 20 1/2"; ROPE ASSEMBLY, SINGLE, 15 5/16": Rope consists of 6 right hand, regular lay strands, closed around a synthetic fiber core, with each preformed strand consistin
020-0047	ROPE ASSEMBLY, SINGLE, 32 5/8"	1	of 8 galvanized steel wires tightly covered with multifilament polypropylene fibers. Aluminum end connectors and ferrules with stainless steel screws.
020-0048	ROPE ASSEMBLY, SINGLE, 20 1/2"	1	
020-0049	ROPE ASSEMBLY, SINGLE, 15 5/16"	1	BRACKET, ROPE CONNECTION: One piece all welded construction
030-1860	BRACKET, ROPE CONNECTION	3	consisting of a formed 3/16" stainless steel plate and a 8 GA galvanized steel sheet. Finished with a baked on powder coating.
030-2352	INTENSITY ARCH #5	1	Sieer Sheek. Finished with a baked on powder coating.
030-2353	INTENSITY ARCH #6	1	INTENSITY ARCH #5: One piece all welded construction consisting of
036-1411	HARDWARE PACKAGE	1	formed 3 1/2" OD x 11 GA galvanized steel tubing, formed 7 GA stainless steel sheet and 8 GA
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	15	galvanized steel plates. Finished with a baked on powder coating.
			steel plates. Finished with a baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless steel hardware and black thermoplasti <u>BRASS SPACER 7/16" OD X 1 1/4"</u> : Brass tube 7/16" OD X .028" wall.
NOTE:       Hardware package(s) may include extra hardware that is not necessary for this installation.         SHIPPING WEIGHT:       150 LBS.			

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

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

2. Attach INTENSITY ARCH #5 to post using hardware specified in DETAIL A.

3. Attach BRACKET, ROPE CONNECTION to post using hardware specified in DETAIL B.

4. Attach ROPE ASSEMBLY, INTENSITY ARCH NET to INTENSITY ARCH #5 and BRACKET, ROPE CONNECTIONs using hardware specified in DETAIL C.

5. Attach ROPE ASSEMBLY, SINGLE, 32 5/8", ROPE ASSEMBLY, SINGLE, 20 1/2", and ROPE ASSEMBLY, SINGLE, 15 5/16" to INTENSITY ARCH #5 using hardware specified in DETAIL C.

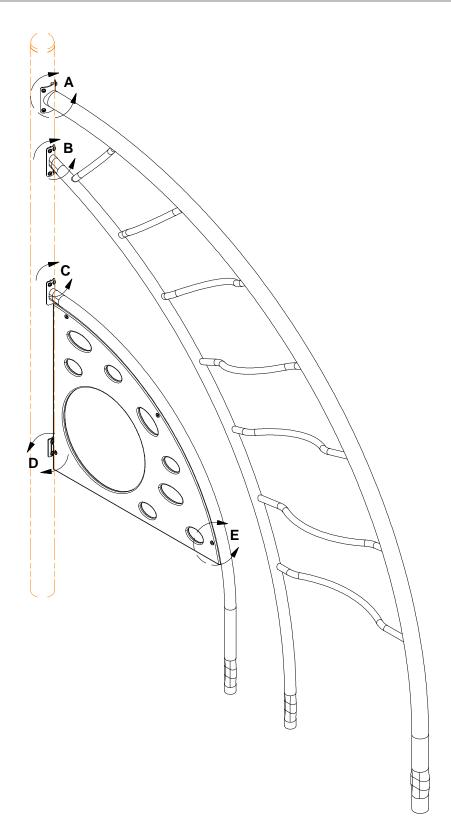
6. Attach INTENSITY ARCH #6 to ROPE ASSEMBLY, INTENSITY ARCH NET, ROPE ASSEMBLY, SINGLE, 32 5/8", ROPE ASSEMBLY, SINGLE, 20 1/2", and ROPE ASSEMBLY, SINGLE, 15 5/16" using hardware specified in DETAIL C. Note tab orientation on INTENSITY ARCH #6.

7. Tighten all hardware. Rope assemblies should be taut when assembly is complete.

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

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

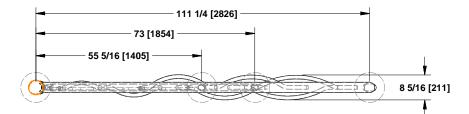


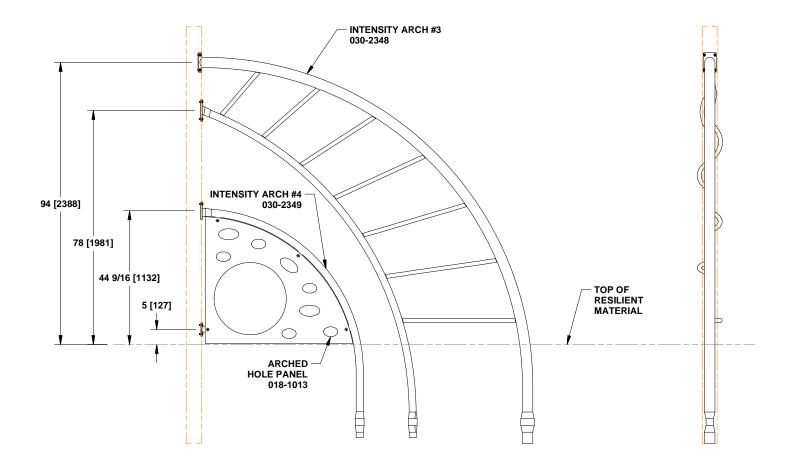


## 370-1584 APEX WAVE CLIMBER

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

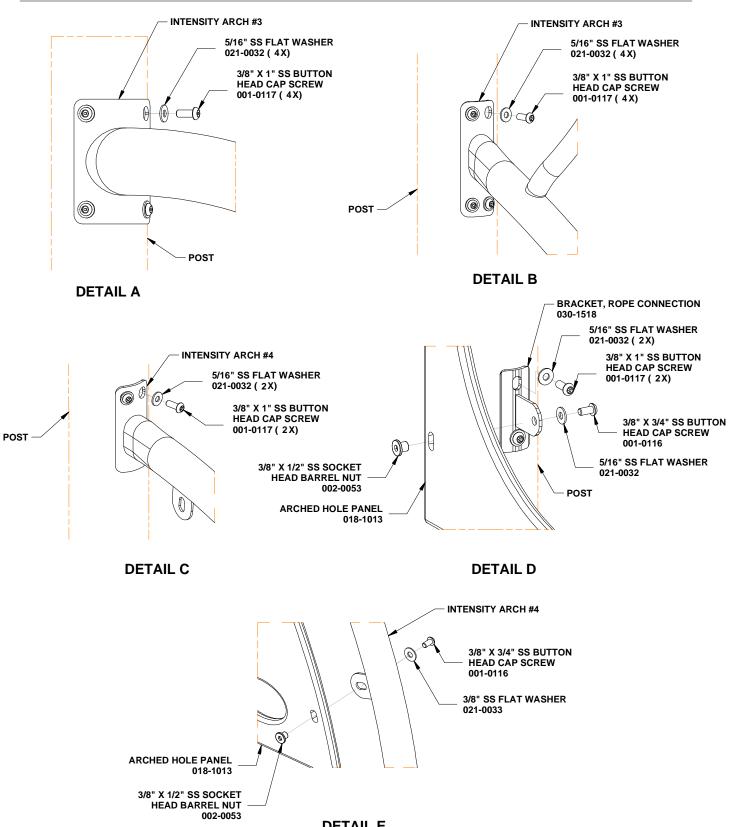






370-1584 APEX WAVE CLIMBER





DETAIL E (3 PLACES)

### 370-1584 APEX WAVE CLIMBER

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

PARTS LIST		SPECIFICATIONS
PART NO. DESCRIPTION	<u>QTY</u>	ARCHED HOLE PANEL: 3/4" extruded HDPE.
018-1013ARCHED HOLE PANEL030-1518BRACKET, ROPE CONNECTION030-2348INTENSITY ARCH #3030-2349INTENSITY ARCH #4036-1412HARDWARE PACKAGE	1 1 1 1	<ul> <li><u>BRACKET, ROPE CONNECTION</u>: One piece all welded construction consisting of a formed 3/16" stainless steel plate and a 8 GA galvanized steel sheet. Finished with a baked on powder coating.</li> <li><u>INTENSITY ARCH #3</u>: One piece all welded construction consisting of formed 3 1/2" x 11 GA &amp; 2 3/8" OD x 10 GA galvanized steel tubing, formed 7 GA stainless steel plates, and formed 1.315" x 12 GA galvanized steel tubes. Finished with a baked on powder coating.</li> <li><u>INTENSITY ARCH #4</u>: One piece all welded construction consisting of formed 2 3/8" OD x 10 GA galvanized steel tubing, formed 7 GA stainless steel plate, and 10 GA galvanized steel plates. Finished with a baked on powder coating.</li> <li><u>HARDWARE PACKAGE</u>: Stainless steel and zinc plated steel.</li> </ul>
<b>NOTE:</b> Hardware package(s) may include extra hard that is not necessary for this installation.	dware	SHIPPING WEIGHT: 184 LBS.

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

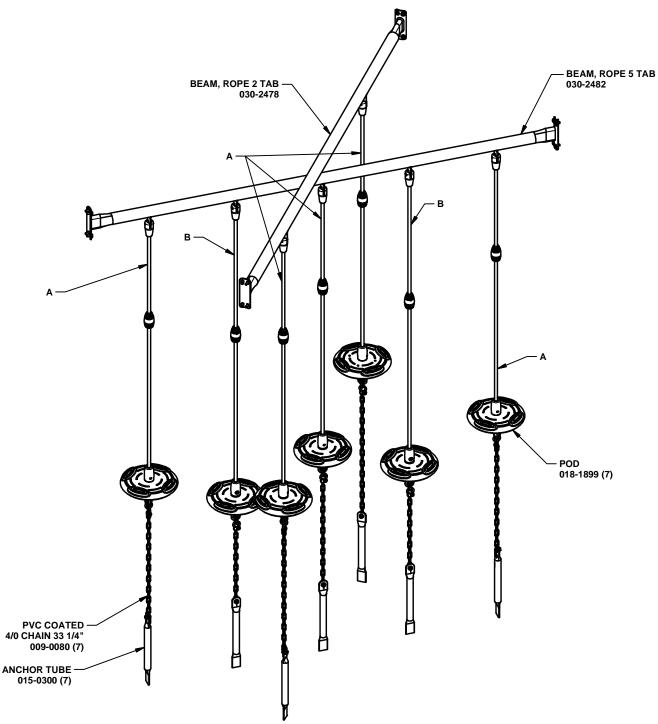
- 1. Locate and dig footing holes as per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Attach INTENSITY ARCH #3 to post using hardware specified in DETAIL A and DETAIL B.
- 3. Attach INTENSITY ARCH #4 to post using hardware specified in DETAIL C.
- 4. Attach BRACKET, ROPE CONNECTION to post using hardware specified in DETAIL D.
- 5. Attach ARCHED HOLE PANEL to arch and bracket using hardware specified in DETAIL D and DETAIL E.
- 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.

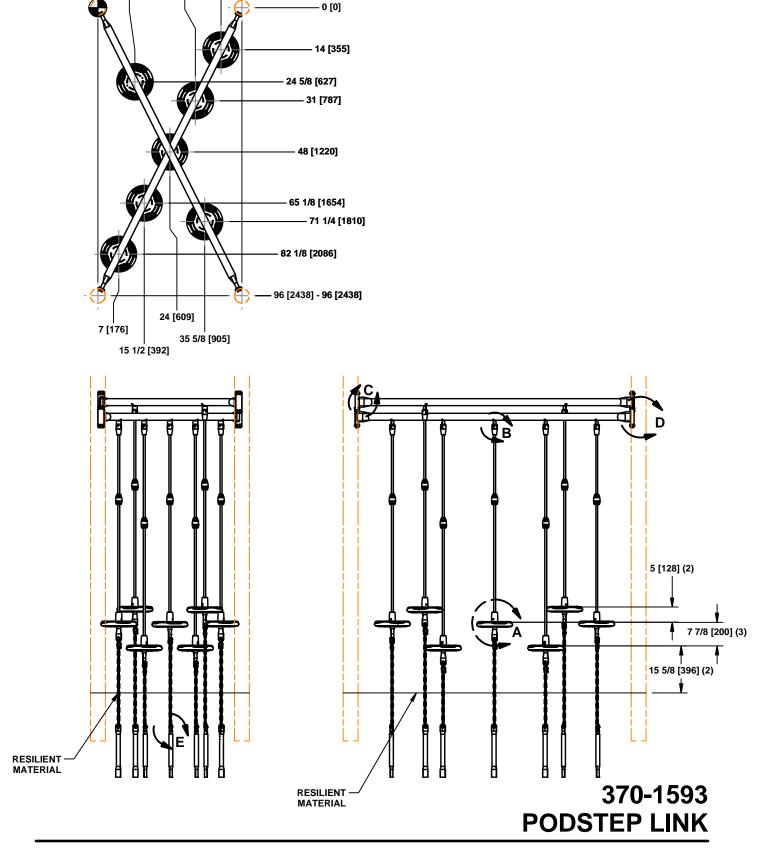


**ISO VIEW** 





## 370-1593 PODSTEP LINK





0 [0]

12 3/8 [313]

48 [1219]

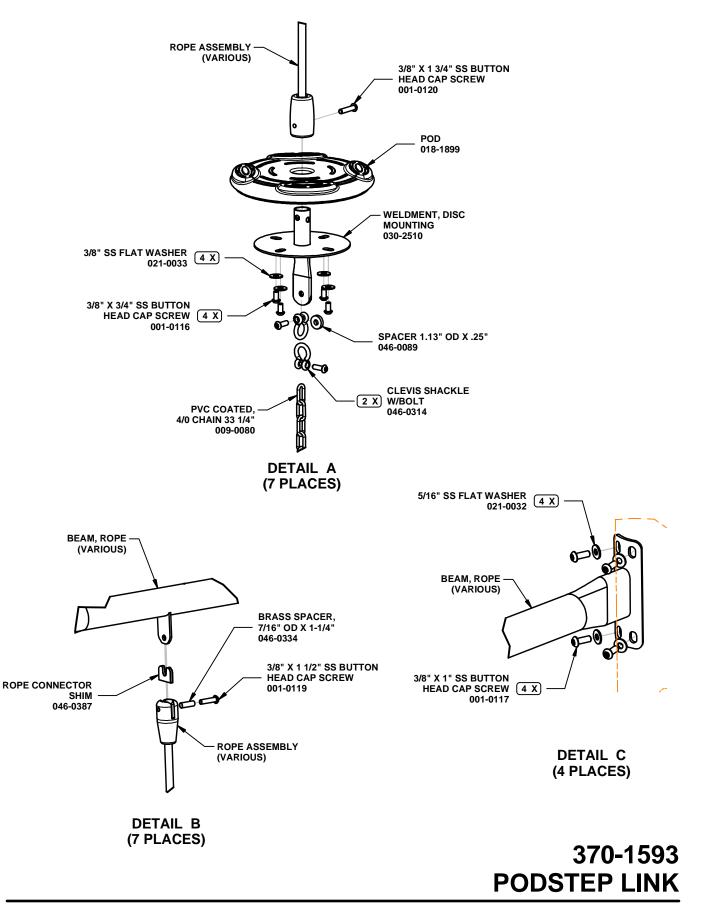
41 [1042]

32 1/2 [826]

**TOP VIEW** 

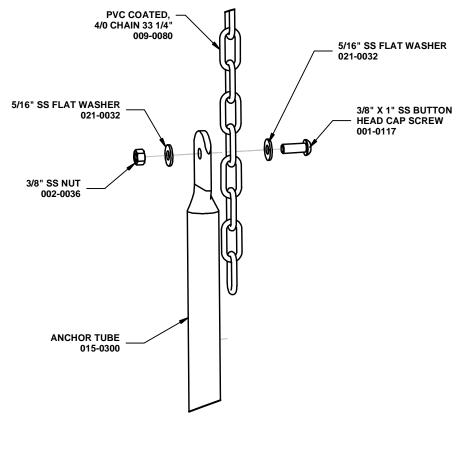
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.





Telephone 920-921-9220





DETAIL D (7 PLACES)



	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	PVC COATED, 4/0 CHAIN 33 1/4" : 3/8" diameter, 4/0 straight coil chain, PVC coated after fabrication.
009-0080	PVC COATED 4/0 CHAIN 33 1/4"	7	ANCHOR TUBE : 1.315" OD x 12 GA galvanized steel tubing.
015-0300	ANCHOR TUBE	7	ANCHOR TOBE : 1.315 OD X 12 GA galvanized steel tubing.
018-1899	POD	7	POD: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double
020-0071	ROPE ASSEMBLY, DISC TO TAB 64 1/8"	5	wall construction.
020-0084	ROPE ASSEMBLY, DISC TO TAB 72 1/4"	2	ROPE ASSEMBLY, DISC TO TAB 72 1/4"; ROPE ASSEMBLY, DISC TO TAB 64 1/8": Rope
030-2478	BEAM, ROPE 2 TAB	1	consists of 6 right hand, regular lay strands, closed around a synthetic fiber core, with each
030-2482	BEAM, ROPE 5 TAB	1	preformed strand consisting of 8 galvanized steel wires tightly covered with polyester fibers. Aluminum grip, end connectors, and ferrules with stainless steel screws.
030-2510	WELDMENT, DISC MOUNTING	7	
036-2010	HARDWARE PACKAGE	1	BEAM, ROPE 2 TAB; BEAM, ROPE 5 TAB: One piece all welded construction consisting of 2.375" OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on
046-0089	SPACER 1.13" OD X .25"	7	2.375" OD X 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating.
046-0291	LOCTITE	1	
046-0314	CLEVIS SHACKLE W/BOLT	14	HARDWARE PACKAGE: Stainless steel and black thermoplastic.
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	7	SPACER 1.13" OD X .25": 1/4" Nylatron GS.
	ardware package(s) may include extra harc necessary for this installation.	lware	CLEVIS SHACKLE W/BOLT: 5/16" Shackle with a 3/8" X 1 1/2" bolt. BRASS SPACER 7/16" OD X 1 1/4": Brass Tube 7/16" OD X .028" Wall. SHIPPING WEIGHT: 152 LBS.
		iware	SHIPPING WEIGHT: 152 LBS.

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

1. Dig footing holes per dimensions shown in the top view. See typical concrete footing details, which are located in the preface of your installation manual.

2. Attach BEAM, ROPE 2 TAB to 5" OD POST using HARDWARE as shown in DETAIL C.

3. Attach BEAM, ROPE 5 TAB to 5" OD POST using HARDWARE as shown in DETAIL C.

4. Attach POD to WELDMENT, DISC MOUNTING and ROPE ASSEMBLY, DISC TO TAB 72 1/4", or ROPE ASSEMBLY, DISC TO TAB 64 1/8" using HARDWARE as shown in DETAIL A.

5. Attach WELDMENT, DISC MOUNTING to PVC COATED, 4/0 CHAIN 33 1/4" with two CLEVIS SHACKLES W/BOLT and SPACER 1.13" OD X .25" as shown in DETAIL A.

6. Partially remove each bolt from CLEVIS SHACKLE W/BOLT, apply Loctite to threads and tighten bolt.

7. Attach PVC COATED, 4/0 CHAIN 33 1/4" to ANCHOR TUBE using HARDWARE as shown in DETAIL D.

8. Attach ROPE ASSEMBLY, DISC TO TAB 64 1/8" and ROPE ASSEMBLY, DISC TO TAB 72 1/4" to BEAM, ROPE 2 TAB and BEAM, ROPE 5 TAB using HARDWARE as shown in DETAIL B and ISO VIEW.

9. Block-up, level and plumb component.

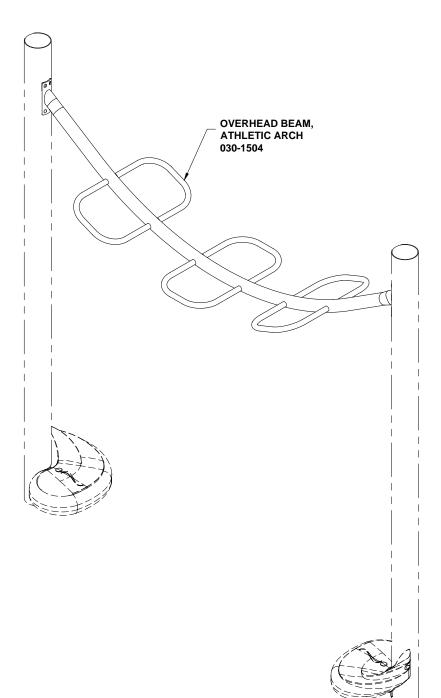
10. Tighten all hardware.

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

12. **MAKE SURE ROPES ARE TAUT**. If some are not taut, remove bolts from ANCHOR TUBE as shown in DETAIL D and put it through the next higher link. Tighten the bolts again.

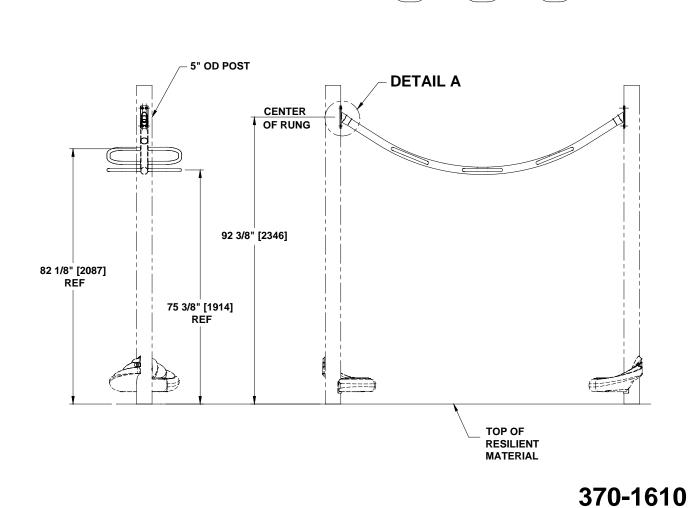
13. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

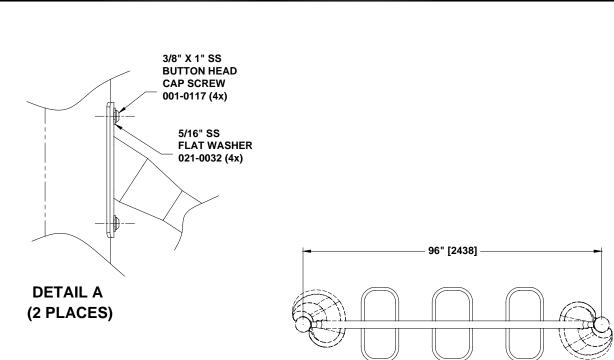




# 370-1610 ATHLETIC ARCH OH

**ATHLETIC ARCH OH** 



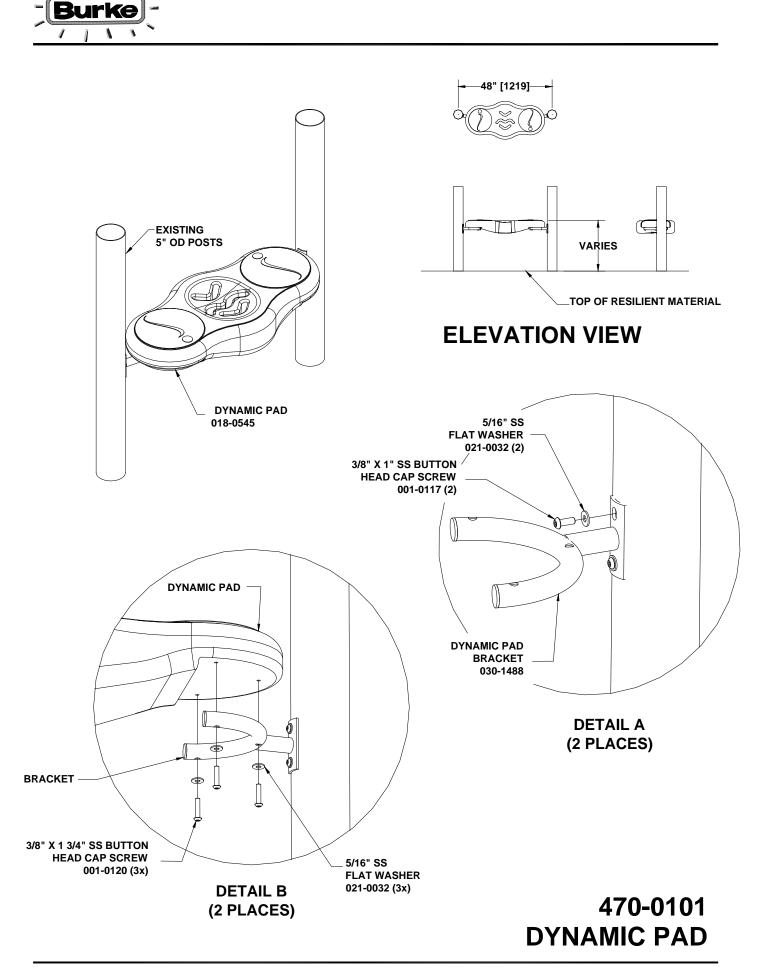




	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	OVERHEAD BEAM, ATHLETIC ARCH: One piece all welded
030-1504	OVERHEAD BEAM, ATHLETIC ARCH	1	construction consisting of 2 3/8" OD x 10 GA & 1.029" OD x 14 GA galvanized steel tubing, and 7 GA galvanized steel
036-0258	HARDWARE PACKAGE	4	plate. Finished with a baked on powder coating.
			HARDWARE PACKAGE: Stainless steel.
	ware package(s) may include extra har ecessary for this installation.	dware	SHIPPING WEIGHT: 46 LBS.

- Attach ATHLETIC ARCH OVERHEAD BEAM to posts using 3/8" x 1" SS button head cap screw and 5/16" SS flat washer. See DETAIL A.
- 2. Plumb and level components. Tighten all hardware.
- 3. Pour concrete and let set 2-3 days.
- 4. INSTALL RESILIENT SURFACING MATERIAL IN ACCORDANCE TO INSTALLATION GUIDELINES.

370-1610.doc Description: ATHLETIC ARCH OH REV: 00 PCN: 16-0193 9/1/2016



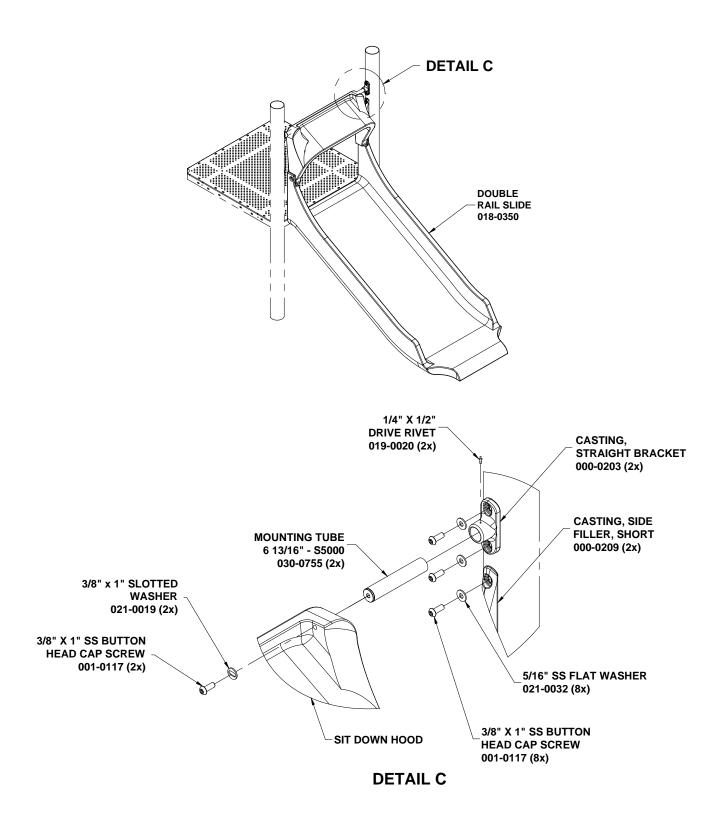
PART NO.       DESCRIPTION       QTY         018-0545       DYNAMIC PAD       1         030-1488       BRACKET, DYNAMIC PAD       2         036-1425       HARDWARE PACKAGE       1         036-1425       HARDWARE PACKAGE       1         036-1425       HARDWARE PACKAGE       1         036-1425       HARDWARE PACKAGE       1         036-1425       HARDWARE PACKAGE       1		— PARTS LIST —		SPECIFICATIONS		
Note: Hardware package(s) may include extra hardware that is not necessary for this installation.       construction consisting of 10 GA galvanized sheet steel, 7 GA stainless steel sheet and formed 1.315° OD x 14 GA galvanized steel tubing. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel	018-0545 030-1488	DYNAMIC PAD BRACKET, DYNAMIC PAD		molded, U.V. stabilized polyethylene with double wall construction, molded in 3/8" T-nut inserts and a textured		
Note: Hardware package(s) may include extra hardware that is not necessary for this installation.				construction consisting of 10 GA galvanized sheet steel, 7 GA stainless steel sheet and formed 1.315" OD x 14 GA galvanized steel tubing. Finished with a baked on powder		
that is not necessary for this installation. SHIPPING WEIGHT: 27 LBS.				HARDWARE PACKAGE: Stainless steel		
that is not necessary for this installation. SHIPPING WEIGHT: 27 LBS.						
that is not necessary for this installation. SHIPPING WEIGHT: 27 LBS.						
that is not necessary for this installation. SHIPPING WEIGHT: 27 LBS.						
that is not necessary for this installation. SHIPPING WEIGHT: 27 LBS.						
			ktra hardware	SHIPPING WEIGHT: 27 LBS.		

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

- 1. Attach DYNAMIC PAD to DYNAMIC PAD BRACKET using 3/8" X 1 3/4" SS button head cap screws and 5/16" SS flat washers. See DETAIL B.
- 2. Attach DYNAMIC PAD BRACKETS to 5" posts using 3/8" X 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- 4. Block-up and level.
- 5. Tighten all hardware.
- 6. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

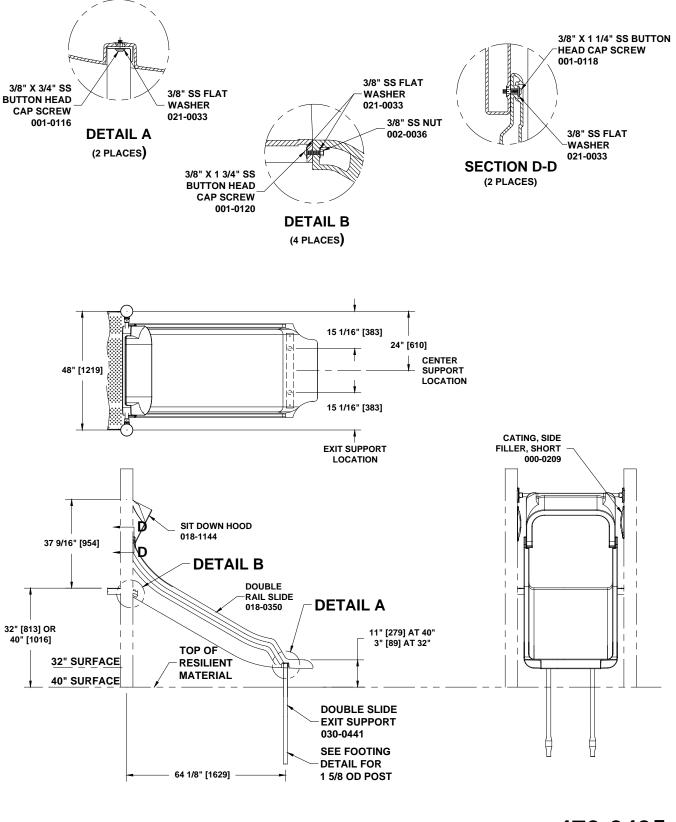
470-0101.doc Description: DYNAMIC PAD REV: 01 PCN: 15-0016 1/28/2015





# 470-0435 DOUBLE RAIL SLIDE 32"-40"





## 470-0435 DOUBLE RAIL SLIDE 32"-40"

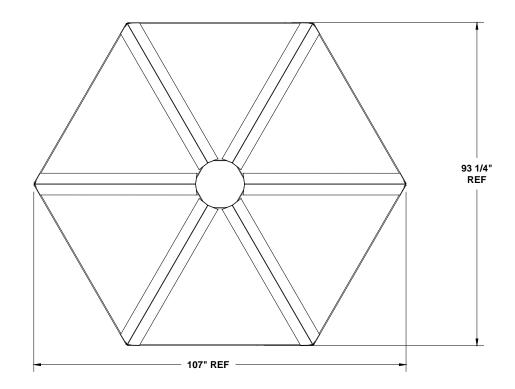
	PARTS LIST		ſ	SPECIFICATIONS
PART NO. 000-0203	DESCRIPTION CASTING, STRAIGHT BRACKET	<u>QTY</u> 2		CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
000-0209 018-0350 018-1144	CASTING, SIDE FILLER, SHORT DOUBLE RAIL SLIDE SIT DOWN HOOD	2 2 1 1		CASTING, SIDE FILLER, SHORT: A56 Aluminum. Finished with baked on powder coating.
030-0441 030-0755 036-1374	DOUBLE SLIDE EXIT SUPPORT MOUNTING TUBE 6 13/16" - S5000 HARDWARE PACKAGE	1 2 1		DOUBLE RAIL SLIDE: Linear, low density, rotationally molded, U.V. stabilized, polyethylene, .250" thick, double wall construction. Molded in 3/8" T-nut inserts and textured surface.
				<u>SIT DOWN HOOD</u> : 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.
				DOUBLE SLIDE EXIT SUPPORT: One piece all welded construction consisting of 1.660" OD x 13 GA galvanized steel tubing and 2 1/2" x 1 1/2" x 3/16" HRS angle. Finished with a baked on powder coating.
				MOUNTING TUBE 6 13/16" - S5000: One piece all welded construction consisting of a 1.315 OD x .083" wall galvanized tube and a 12L14 steel threaded insert. Finished with a baked on powder coating.
				HARDWARE PACKAGE: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.
Note: Hardware package(s) may include extra hardware				
that is not no	ecessary for this installation.			SHIPPING WEIGHT: 127 LBS.

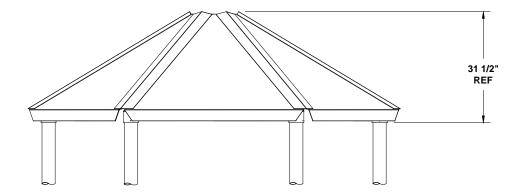
## NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

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

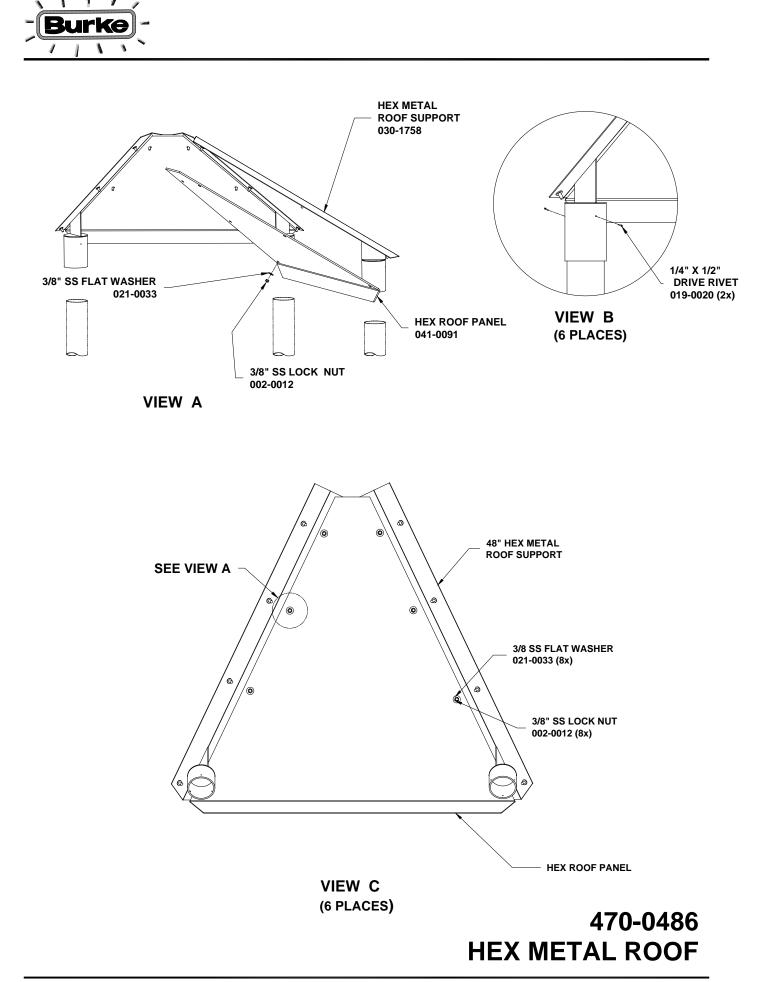
- 1. After platform has been installed, locate and dig footing hole as per dimensions shown. See footing detail drawing, which is located in the preface of your installation manual.
- Attach DOUBLE SLIDE EXIT SUPPORT to slide using 3/8" x 3/4" button head cap screws and 3/8" washers. See DETAIL A. Tighten fasteners.
- Position slide into footing holes. Attach slide to platform using 3/8" x 1 3/4" button head cap screws, 3/8" washers and 3/8" nuts. See DETAIL B. Make sure that the slide is flush and tight to platform.
- Locate holes on 5" O.D. posts for mounting CAST SIDE FILLERS and assemble to posts using 3/8" x 1" SS button head cap screws and 5/16" SS washers. See DETAIL C.
- 5. Locate holes on 5" O.D. posts for mounting SIT DOWN HOOD assembly.
- Insert MOUNTING TUBES into sit down hood and attach using 3/8" x 1" button head cap screws and 3/8" slotted washers. See DETAIL C.
- 7. Attach STRAIGHT BRACKETS to 5" O.D. posts using 3/8" x 1" button head cap screws and 5/16" washers. See DETAL C.
- 8. Attach sit-down hood to slide using 3/8" x 1 1/4" button head cap screws, and 3/8" SS flat washers. See SECTION D-D.
- 9. Tighten all hardware.
- 10. Block-up, level and plumb.
- 11. Pour concrete. Let set for two to three days.
- 12. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.







470-0486 HEX METAL ROOF

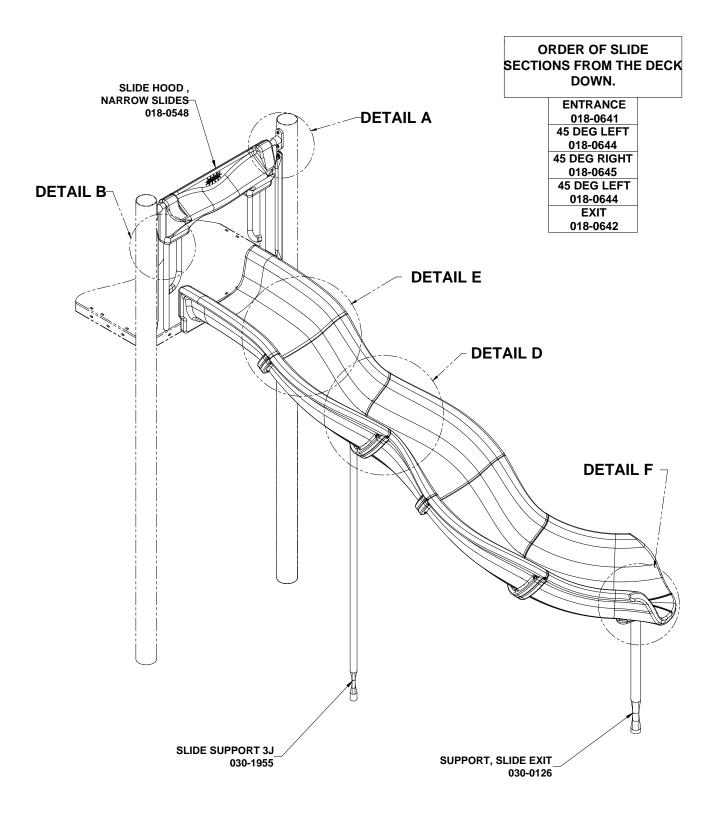


PARTS LIST		SPECIFICATIONS
PART NO.DESCRIPTION030-175848" HEX METAL ROOF SUPI036-1186HARDWARE PACKAGE041-0091HEX ROOF PANEL	1 6	<ul> <li><u>48" HEX METAL ROOF SUPPORT</u>: One piece all welded construction consisting of 5" OD X 3/16 wall tubing, 12 ga galv sheet steel, 10 ga galv sheet steel, 8 ga galv sheet steel and 3/8-16 X 3/4" weld screws. Finished with a baked on powder coating.</li> <li><u>HARDWARE PACKAGE</u>: Stainless steel washers, zinc plated steel nuts and aluminum rivets with stainless steel pins.</li> <li><u>HEX ROOF PANEL</u>: 14 ga galv sheet steel, finished with a baked on powder coating.</li> </ul>
Note: Hardware package(s) may include ex that is not necessary for this installation.		SHIPPING WEIGHT: 280 LBS.

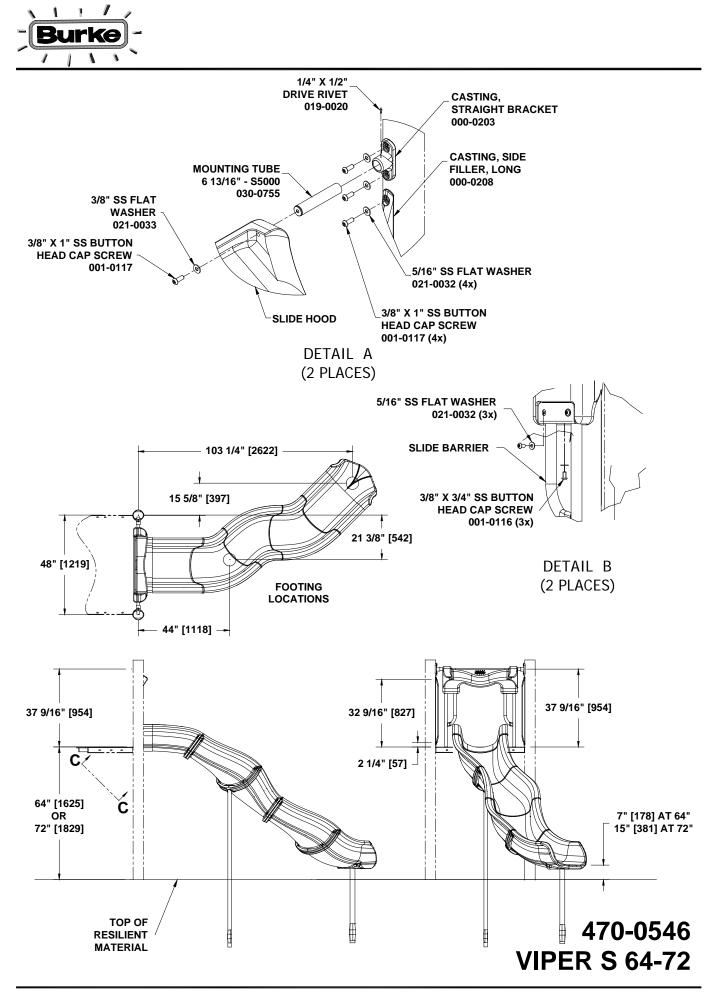
NOTE: Do not tighten hardware until instructed to do so.

- 1. Position 2 METAL ROOF SUPPORTS on flat surface with weld screws facing up.
- Position 1 HEX ROOF PANEL over metal roof supports, aligning weld screws on the supports with the slotted openings in the panels. Wide end of panel should be nearest to capped ends of roof supports, with flange facing up. (When positioned on structure, flange will face downward). Secure panel to roof supports using 3/8" SS FLAT WASHERS and 3/8" LOCKNUTS. SEE VIEW C.
- 3. Assemble 2 more panels together following steps 1 & 2.
- 4. Position assembled panels and supports on top of posts.
- 5. Attach remaining roof panels to roof using 3/8" SS flat washers, 3/8" lock nuts. SEE VIEW A.
- 6. Tighten all hardware.
- 7. Drill 1/4" diameter holes through metal roof supports and posts, using holes in roof supports as guides. SEE VIEW B.
- 8. Install 1/4" diameter drive rivets and hammer pin. SEE VIEW B.

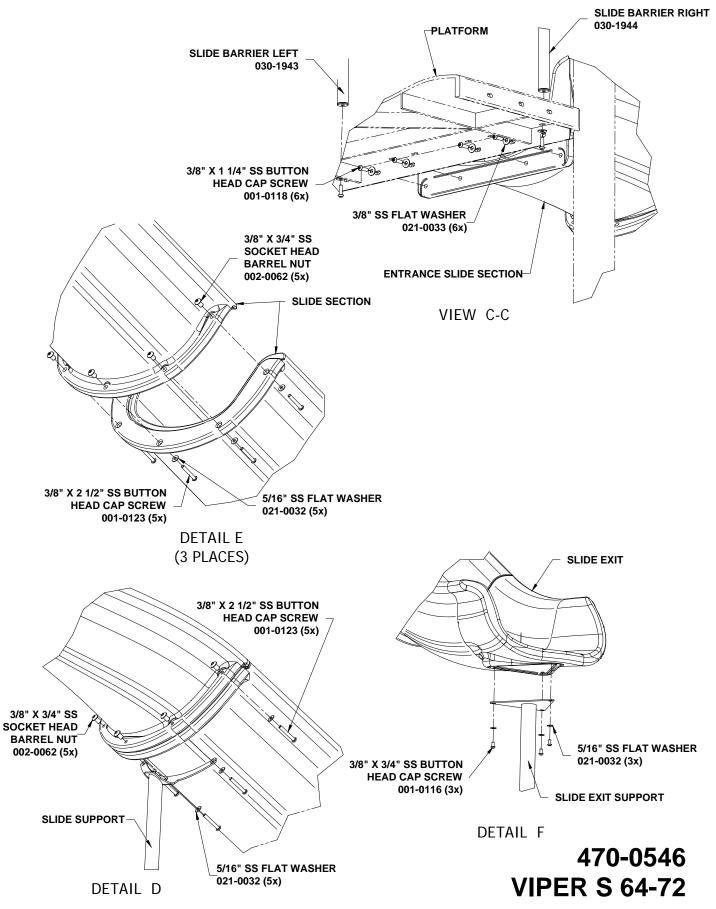




# 470-0546 VIPER S 64-72







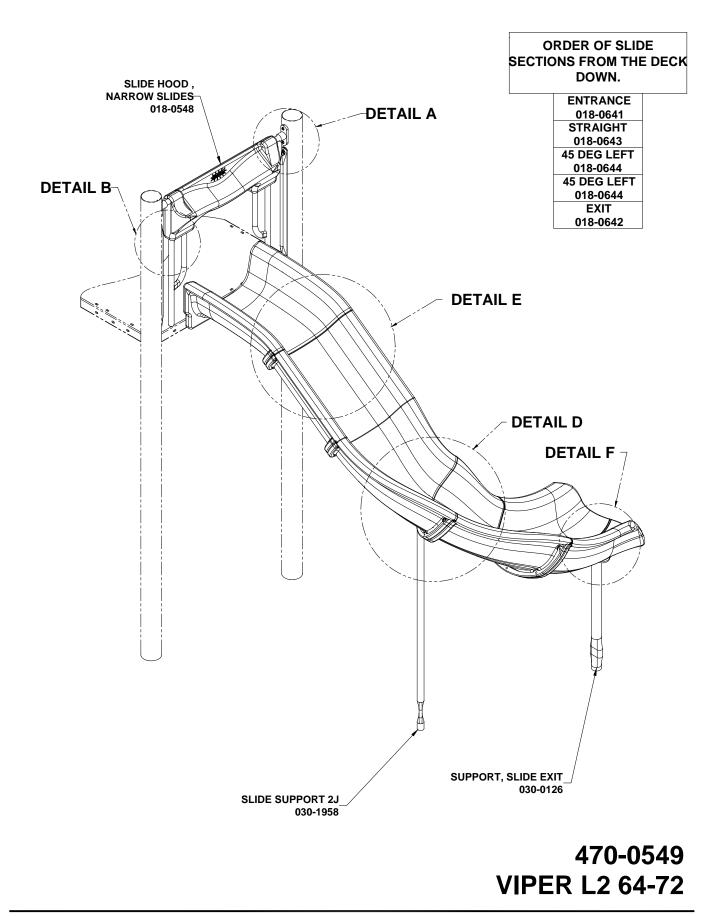
000-0203CASTING, STRAIGHT BRACKET2000-0208CASTING, SIDE FILLER, LONG2018-0548SLIDE HOOD , NARROW SLIDES1018-0641ENTRANCE SLIDE SECTION1018-0642EXIT SLIDE SECTION1018-064445 DEG LEFT SLIDE SECTION2018-064545 DEG RIGHT SLIDE SECTION1030-0126SUPPORT, SLIDE EXIT1030-1943SLIDE BARRIER LEFT1030-1944SLIDE BARRIER RIGHT1030-1955SLIDE SUPPORT 3J1036-1143HARDWARE PACKAGE2036-1148HARDWARE PACKAGE1MOUNTSLIDE SUPPORT 3J1036-1148HARDWARE PACKAGE1	SPECIFICATIONS
	OOD. NARROW SLIDES: ENTRANCE SLIDE SECTION: EXIT SLIDE         Y: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized         ene with double wall construction, molded in 3/8" T-nut inserts, and a surface.         LEFT SLIDE SECTION: 45 DEG RIGHT SLIDE SECTION: 1/4" thick, w density, rotationally molded, U.V. stabilized polyethylene with double truction, and a textured surface.         RT, SLIDE EXIT: One piece all welded construction consisting of 2 3/8" GA galvanized steel tubing and 8 GA galvanized sheet steel. Finished ked on powder coating.         NG TUBE 6 13/16" - S5000: One piece all welded construction go f a 1.315 OD x .083" wall galvanized tube and a 12L14 steel insert. Finished with a baked on powder coating.         ARRIER LEFT; SLIDE BARRIER RIGHT : One piece all welded ion consisting of 1.315" OD x 12 GA galvanized steel tubing, 10 GA ad sheet steel, and HDPE threaded inserts. Finished with a baked on
that is not papagage for this installation	PING WEIGHT: 185 LBS.

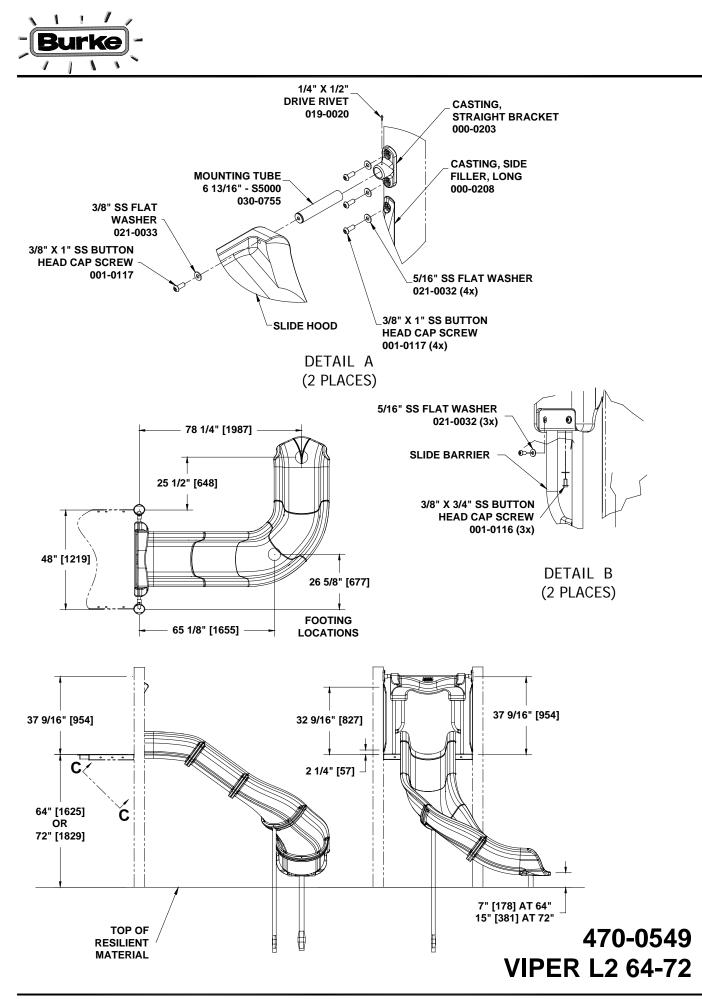
NOTE: When assembling the slide sections, if there is any alignment difference between slide sections, either in the bedway or the top rails, try to assemble so the alignment differencee would drop off rather than raise up when going down the slide. See DETAIL E. NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

NOTE: Specific hardware used for assembly is shown in the Detail views.

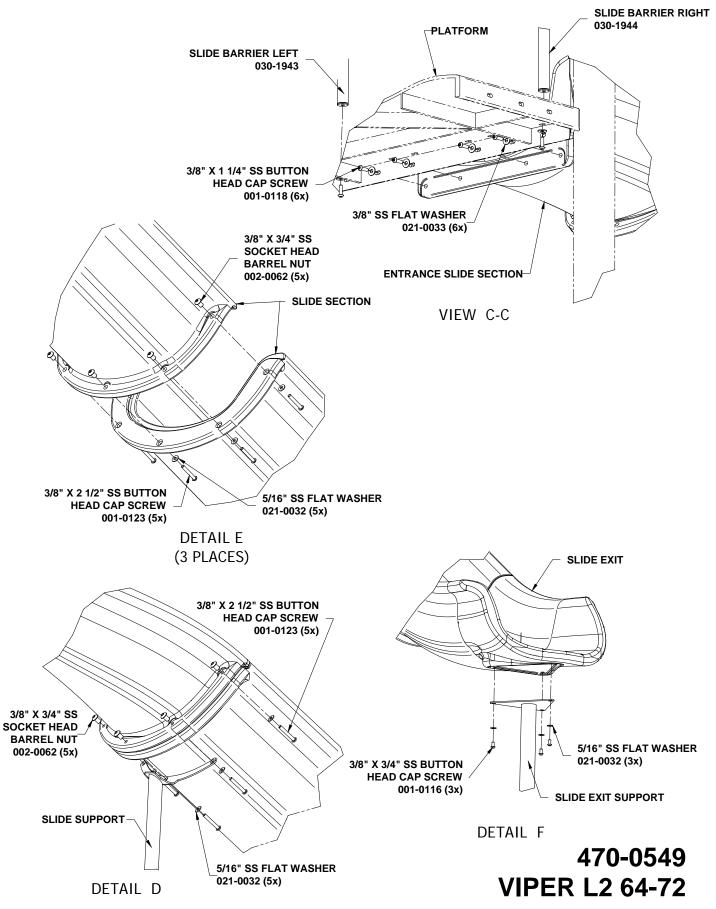
- 1. Install platform(s). See appropriate installation instructions located in your installation manual.
- 2. Dig footing holes for slide supports per dimensions shown. See typical concrete footing details which are located in the preface of your installation manual.
- 3. Attach CAST SIDE FILLER, LONG to 5" O.D. posts as shown in DETAIL A.
- 4. Assemble the slide chute. The order of slide sections is shown on the chart, and the assembly method and hardware is shown in DETAIL D & E. It is important to have the slide sections in good alignment and this is determined by the assembly. If possible, you want to avoid having any uphill bumps or misalignments as you would go down the slide. If there are any misalignments, either in the bedway or the top rails, try to assemble so the misalignment would drop off rather than raise up when going down the slide. It usually works best to put two sections together with all the hardware loose first. Tighten the middle screw under the middle of the bedway first, making sure to align the bedway surfaces and the top surface of the outside rails with any misalignment dropping off downhill. Then tighten the screws on both sides, while holding the sidewalls in good alignment. Complete this assembly for all slide sections in each slide chute, making sure to attach the SLIDE SUPPORT where shown in front view and as detailed in DETAIL D. Also attach the SLIDE EXIT SUPPORT as shown in DETAIL F.
- 5. Attach the assembled slide chute to the platform as shown in VIEW C-C. The slide support and exit support should fall into the footing holes, and should rest on spacers in the bottom of the hole to avoid stress on the attachment joints and platform. If necessary, place spacers, such as bricks, in the hole under the supports to shim up and provide support. Make sure proper exit height is attained. Once aligned and supported properly, attach the SLIDE ENTRANCE to the platform as shown in VIEW C-C.
- 6. Attach one Casting Straight Bracket to post. See DETAIL A.
- 7. Attach SLIDE HOOD as shown in DETAIL A & B. Attach two mounting tubes to slide hood on both sides. Attach both Side Barriers to the slide hood. Bring the hood to the post with the Casting Straight Bracket already attached, slide the mounting tube into the casting attached to the post. Slide the bracket casting onto the mounting tube on the opposite side, attach the bracket casting to the post. Make sure the hood is centered between the posts. Attach Slide Barriers to platform as shown in VIEW C-C.
- 8. Tighten all hardware.
- 9. Drill 1/4" diameter hole through bracket castings. Insert 1/4" X 1/2" drive rivet and engage drive rivet by hammering until pin is flush with head of rivet. See DETAIL A.
- 10. Pour concrete and allow concrete to set for 2-3 days.
- 11. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines











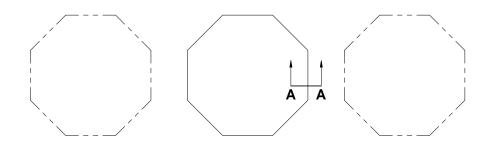
000-0203CASTING, STRAIGHT BRACKET2000-0208CASTING, SIDE FILLER, LONG2018-0548SLIDE HOOD, NARROW SLIDES1018-0641ENTRANCE SLIDE SECTION1018-0642EXIT SLIDE SECTION1018-0643STRAIGHT SLIDE SECTION1018-064445 DEG LEFT SLIDE SECTION2030-0126SUPPORT, SLIDE EXIT1030-0755MOUNTING TUBE 6 13/16" - S50002030-1943SLIDE BARRIER LEFT1030-1958SLIDE SUPPORT 2J1036-1143HARDWARE PACKAGE2036-1148HARDWARE PACKAGE1	CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated.
P S F H	<ul> <li>Finished with baked on powder coating.</li> <li>CASTING, SIDE FILLER, LONG: A56 Aluminum. Finished with baked on powder coating.</li> <li>SLIDE HOOD. NARROW SLIDES: ENTRANCE SLIDE SECTION: EXIT SLIDE SECTION: 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 extured surface.</li> <li>STRAIGHT SLIDE SECTION: 45 DEG LEFT SLIDE SECTION: 1/4" thick, inear, low density, rotationally molded, U.V. stabilized polyethylene with double vall construction, and a textured surface.</li> <li>SUPPORT, SLIDE EXIT: One piece all welded construction consisting of 2 3/8" DD x 12 GA galvanized steel tubing and 8 GA galvanized sheet steel. Finished with a baked on powder coating.</li> <li>MOUNTING TUBE 6 13/16" - S5000: One piece all welded construction consisting of a 1.315 OD x .083" wall galvanized tube and a 12L14 steel hreaded insert. Finished with a baked on powder coating.</li> <li>SLIDE BARRIER LEFT; SLIDE BARRIER RIGHT: One piece all welded construction consisting of 1.315" OD x 12 GA galvanized steel tubing, 10 GA galvanized sheet steel, and HDPE threaded inserts. Finished with a baked on powder coating.</li> <li>SLIDE SUPPORT 2J: 8 gage formed plate welded to 1.660" OD tubing. Finished with baked on powder coat.</li> <li>MARDWARE PACKAGE: Stainless steel</li> </ul>
that is not necessary for this installation	ARDWARE PACKAGE: Stainless steel hardware and aluminum rivets. SHIPPING WEIGHT: 183 LBS.

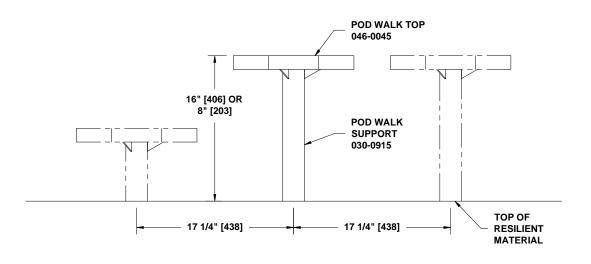
NOTE: When assembling the slide sections, if there is any alignment difference between slide sections, either in the bedway or the top rails, try to assemble so the alignment difference would drop off rather than raise up when going down the slide. See DETAIL E. NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

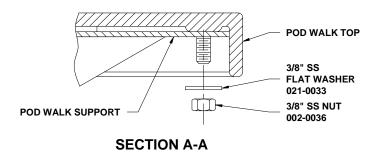
NOTE: Specific hardware used for assembly is shown in the Detail views.

- 1. Install platform(s). See appropriate installation instructions located in your installation manual.
- 2. Dig footing holes for slide supports per dimensions shown. See typical concrete footing details which are located in the preface of your installation manual.
- 3. Attach CAST SIDE FILLER, LONG to 5" O.D. posts as shown in DETAIL A.
- 4. Assemble the slide chute. The order of slide sections is shown on the chart, and the assembly method and hardware is shown in DETAIL D & E. It is important to have the slide sections in good alignment and this is determined by the assembly. If possible, you want to avoid having any uphill bumps or misalignments as you would go down the slide. If there are any misalignments, either in the bedway or the top rails, try to assemble so the misalignment would drop off rather than raise up when going down the slide. It usually works best to put two sections together with all the hardware loose first. Tighten the middle screw under the middle of the bedway first, making sure to align the bedway surfaces and the top surface of the outside rails with any misalignment dropping off downhill. Then tighten the screws on both sides, while holding the sidewalls in good alignment. Complete this assembly for all slide sections in each slide chute, making sure to attach the SLIDE SUPPORT where shown in front view and as detailed in DETAIL D. Also attach the SLIDE EXIT SUPPORT as shown in DETAIL F.
- 5. Attach the assembled slide chute to the platform as shown in VIEW C-C. The slide support and exit support should fall into the footing holes, and should rest on spacers in the bottom of the hole to avoid stress on the attachment joints and platform. If necessary, place spacers, such as bricks, in the hole under the supports to shim up and provide support. Make sure proper exit height is attained. Once aligned and supported properly, attach the SLIDE ENTRANCE to the platform as shown in VIEW C-C.
- 6. Attach one Casting Straight Bracket to post. See DETAIL A.
- 7. Attach SLIDE HOOD as shown in DETAIL A & B. Attach two mounting tubes to slide hood on both sides. Attach both Side Barriers to the slide hood. Bring the hood to the post with the Casting Straight Bracket already attached, slide the mounting tube into the casting attached to the post. Slide the bracket casting onto the mounting tube on the opposite side, attach the bracket casting to the post. Make sure the hood is centered between the posts. Attach Slide Barriers to platform as shown in VIEW C-C.
- 8. Tighten all hardware.
- 9. Drill 1/4" diameter hole through bracket castings. Insert 1/4" X 1/2" drive rivet and engage drive rivet by hammering until pin is flush with head of rivet. See DETAIL A.
- 10. Pour concrete and allow concrete to set for 2-3 days.
- 11. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines





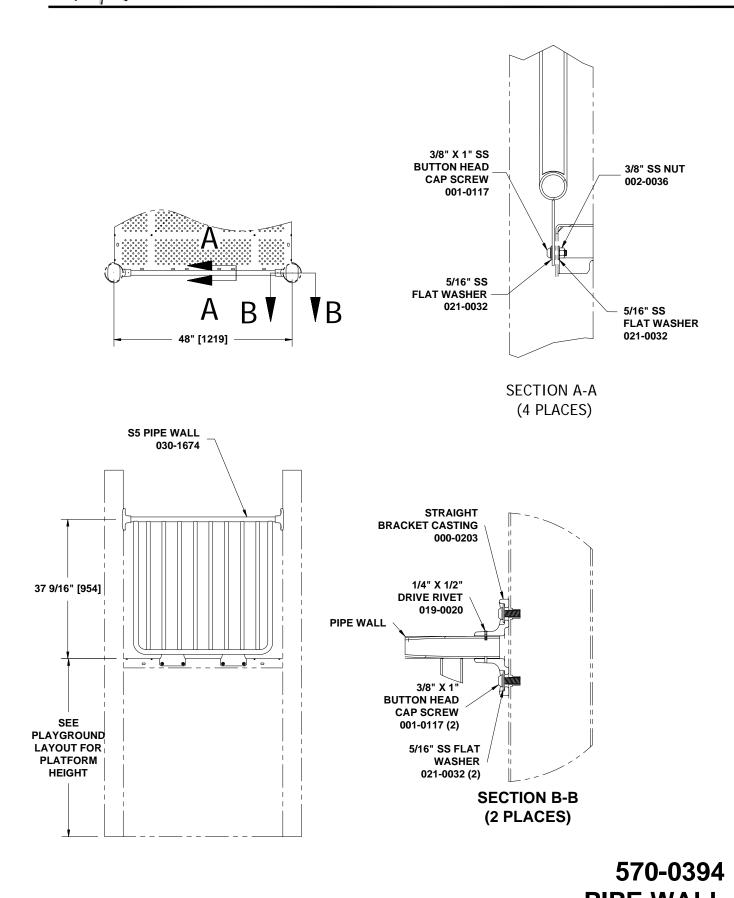




560-0526 SINGLE POD WALK 8"-16"

	PARTS LIST		SPECIFICATIONS
PART NO. 030-0915 036-0596 046-0045	POD WALK SUPPORT 40" HARDWARE PACKAGE POD WALK TOP	<u>QTY</u> 1 1	<ul> <li>POD WALK SUPPORT 40": One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and 10 GA galvanized sheet steel. Finished with a baked on powder coating.</li> <li>HARDWARE PACKAGE: Stainless steel.</li> <li>POD WALK TOP: Formed 1/8" sheet steel with studs welded into place. PVC coated after fabrication.</li> </ul>
	vare package(s) may include extra ecessary for this installation.	a hardware	SHIPPING WEIGHT: 27 LBS.

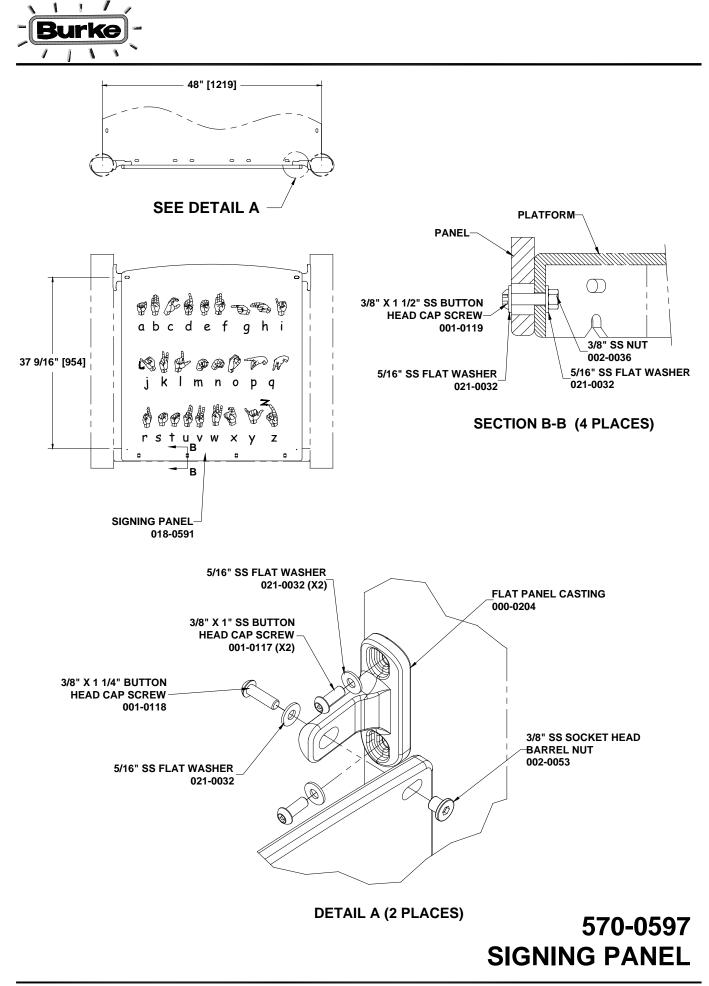
- 1. Determine location of Pod Walk.
- 1. Dig footing holes per dimensions. See typical footing details, which are located in the preface of your installation manual.
- 2. Attach POD WALK SUPPORT to POD WALK TOP using 3/8 SS flat washers and 3/8 SS nuts. See SECTION A-A.
- 3. Tighten hardware
- 4. Insert Pod Walk into footing hole. and block up, plumb and level.
- 5. Pour concrete and let set 2-3 days.
- 6. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



	PARTS LIST		SPECIFICATIONS
PART NO. 000-0203 030-1674 036-0258 036-0806 036-0819	PARTS LIST DESCRIPTION CASTING, STRAIGHT BRACKET S5 PIPE WALL HARDWARE PACKAGE HARDWARE PACKAGE HARDWARE PACKAGE	<b>QTY</b> 2 1 4 1 1	SPECIFICATIONS         CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.         S5 PIPE WALL: One piece all welded construction consisting of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14 GA galvanized steel tubing. Finished with a baked on powder coating.         HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless steel.         HARDWARE PACKAGE: Aluminum Rivets
	are package(s) may include extra harc ecessary for this installation.	lware	SHIPPING WEIGHT: 37 LBS.

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

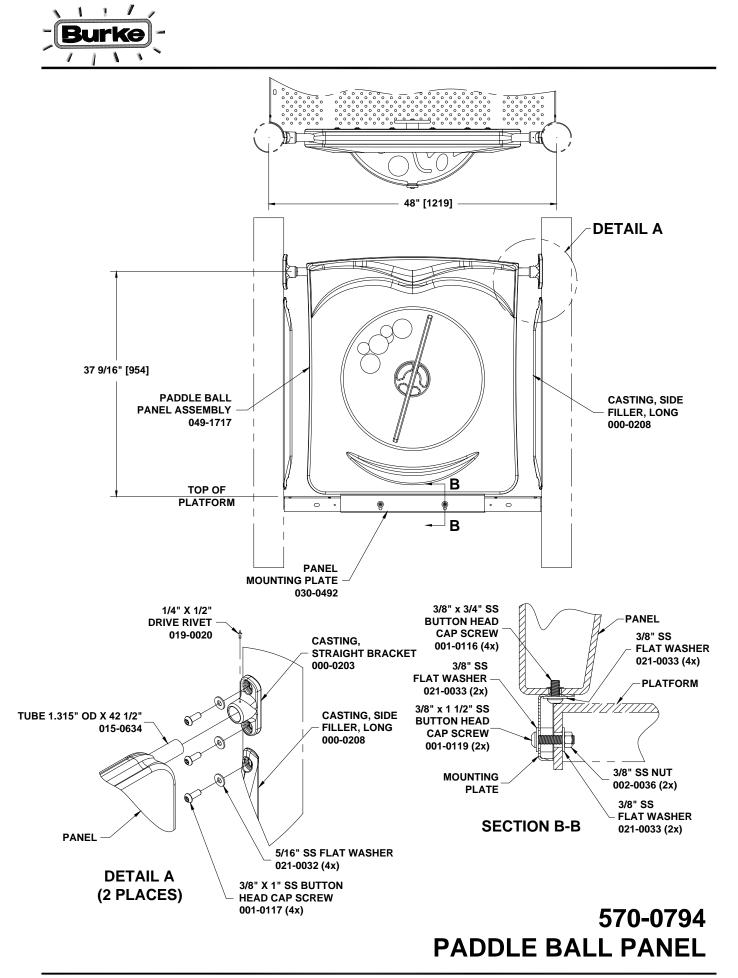
- 1. Slide BRACKETS onto tube on PIPE WALL.
- Attach brackets with pipe wall to 5" OD post using 3/8" x 1" SS button head cap screws and 5/16" SS washers. See SECTION B-B.
- 3. Attach bottom of pipe wall to platform using 3/8" x 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. Tighten all hardware. See SECTION A-A.
- 4. Drill 1/4" diameter holes through pilot hole, into pipe wall and through mounting bracket. See SECTION B-B.
- 5. Drive rivets flush with brackets and pipe wall.
- 6. Tighten All Hardware.



	💳 PARTS LIST 💳			SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>		CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.
000-0204 018-0591	CASTING, FLAT PANEL SIGNING PANEL	2 1	F	Finished with baked on powder coating.
036-1241	HARDWARE PACKAGE	1	<u> </u>	SIGNING PANEL: 3/4" co-extruded HDPE.
			ŀ	HARDWARE PACKAGE: Stainless steel
Note: Hardw that is not n	ware package(s) may include extr ecessary for this installation.	ra hardware		SHIPPING WEIGHT: 46 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. 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 the 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.
- 3. Attach panel to castings using 3/8" x 1 1/4" SS button head cap screws, 5/16" SS flat washers, and 3/8" SS socket head barrel nuts. See DETAIL A.
- 4. Level panel and tighten all hardware.

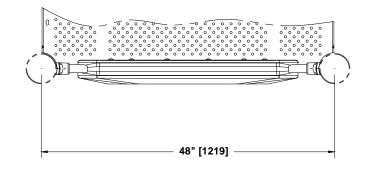


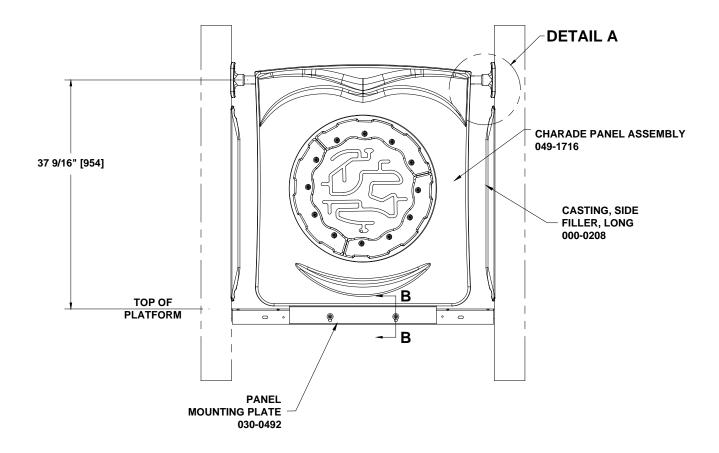
	PARTS LIST		SPECIFICATIONS			
PART NO. 000-0203	DESCRIPTION CASTING, STRAIGHT BRACKET	<u>QTY</u> 2 2	<u>CASTING, STRAIGHT BRACKET</u> : A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.			
000-0208 015-0634 030-0492	CASTING, SIDE FILLER, LONG TUBE 1.315" OD X 42 1/2" PANEL MOUNTING PLATE	2 1 1	CASTING, SIDE FILLER, LONG: A56 Aluminum. Finished with baked on powder coating.			
036-1168 049-1717	HARDWARE PACKAGE PADDLE BALL PANEL ASSEMBLY	1 1	TUBE 1.315" OD X 42 1/2": 1.315" O.D. GALV TUBING			
			PANEL MOUNTING PLATE: One piece all welded construction consisting of 10 GA and 14 GA galvanized steel plates. Finished with a baked on powder coating.			
			HARDWARE PACKAGE: Aluminum rivets and stainless steel screws, nuts, and washers.			
			PADDLE BALL PANEL ASSEMBLY: Assembly consisting of a 1/4" LLDPE double wall rotationally molded panel with spacers made of nylatron, flat window of 1/4" Lexan, bubble made of 3/16" Lexan, paddle ball wheel of 1/2" extruded HDPE, paddle of 3/4" extruded HDPE and ball kit all assembled together with stainless steel hardware.			
	vare package(s) may include extra hardw ecessary for this installation.	are	SHIPPING WEIGHT: 47 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 PANEL MOUNTING PLATE to PADDLE BALL PANEL using 3/8" x 3/4" SS button head cap screws and 3/8"SS flat washers. See SECTION B-B.
- 2. Sleeve TUBE 1.315" OD X 42 1/2" into panel. See DETAIL A.
- Position panel assembly on 5" OD posts and fasten upper hole of CASTING BRACKETS to 5" OD posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 4. Rotate panel assembly up 90 degrees and fasten lower hole in casting brackets to 5" OD posts with 3/8" x 1" SS button head cap screw and 5/16" SS flat washers. See DETAIL A.
- 5. Tighten hardware.
- 6. Rotate panel down to the platform and fasten mounting plate to platform using 3/8" x 1 1/2" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. Tighten hardware. See SECTION B-B.
- 7. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

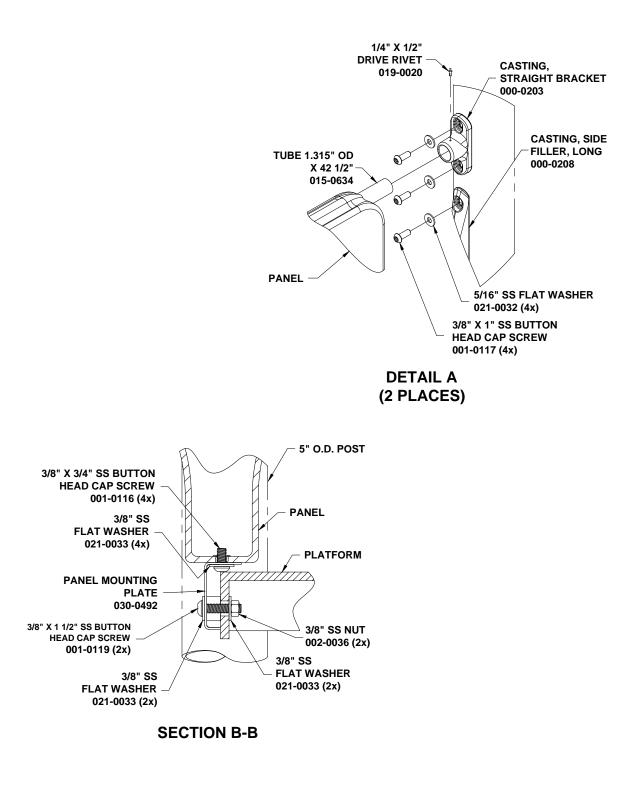






570-0797 CHARADE PANEL, ABOVE PLATFORM





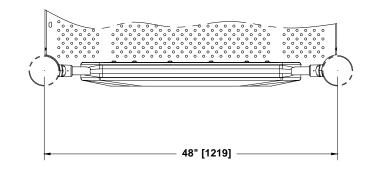
# 570-0797 CHARADE PANEL, ABOVE PLATFORM

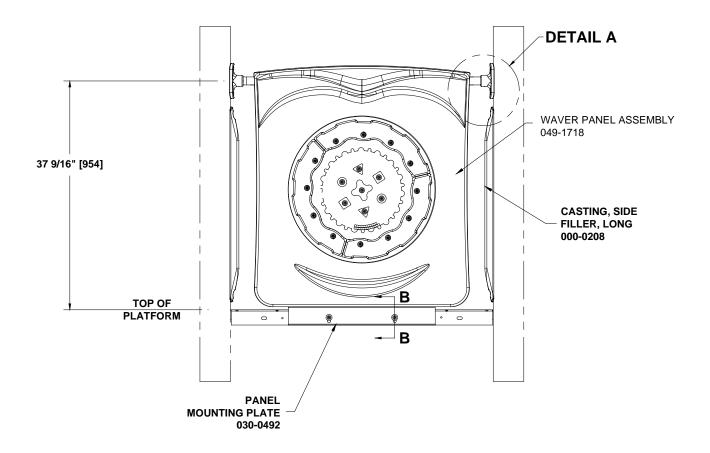
	PARTS LIST		SPECIFICATIONS
PART NO. 000-0203	DESCRIPTION CASTING, STRAIGHT BRACKET	<u>QTY</u> 2	<u>CASTING, STRAIGHT BRACKET</u> : A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
000-0208 015-0634 030-0492 036-1168 049-1716	CASTING, SIDE FILLER, LONG TUBE 1.315" OD X 42 1/2" PANEL MOUNTING PLATE HARDWARE PACKAGE CHARADE PANEL ASSEMBLY	2 1 1 1 1	CASTING, SIDE FILLER, LONG: A56 Aluminum. Finished with baked on powder coating. TUBE 1.315" OD X 42 1/2": 1.315" O.D. GALV TUBING PANEL MOUNTING PLATE: One piece all welded
			construction consisting of 10 GA and 14 GA galvanized steel plates. Finished with a baked on powder coating.
			HARDWARE PACKAGE: Aluminum rivets and stainless steel screws, nuts, and washers.
			<u>CHARADE PANEL ASSEMBLY</u> : Assembly consisting of a 1/4" LLDPE double wall rotationally molded panel, 1/4" clear polycarbonate window, 1/2" extruded HDPE, extruded HDPE and acetal and stainless steel balls all assembled together with stainless steel hardware.
	vare package(s) may include extra hardv ecessary for this installation.	vare	SHIPPING WEIGHT: 62 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. Attach PANEL MOUNTING PLATE to CHARADE PANEL using 3/8" x 3/4" SS button head cap screws and 3/8"SS flat washers. See SECTION B-B.
- Attach SIDE FILLER CASTINGS to post using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 3. Sleeve TUBE 1.315" OD X 42 1/2" into panel. See DETAIL A.
- Position panel assembly on 5" OD posts and fasten upper hole of CASTING BRACKETS to 5" OD posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 5. Rotate panel assembly up 90 degrees and fasten lower hole in casting brackets to 5" OD posts with 3/8" x 1" SS button head cap screw and 5/16" SS flat washers. See DETAIL A.
- 6. Tighten hardware.
- 7. Rotate panel down to the platform and fasten mounting plate to platform using 3/8" x 1 1/2" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. Tighten hardware. See SECTION B-B.
- 8. Drill 1/4" hole through casting and into tube, drive rivet flush with casting. See DETAIL A.
- 9. Apply touch up paint to drive rivet head.
- 10. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

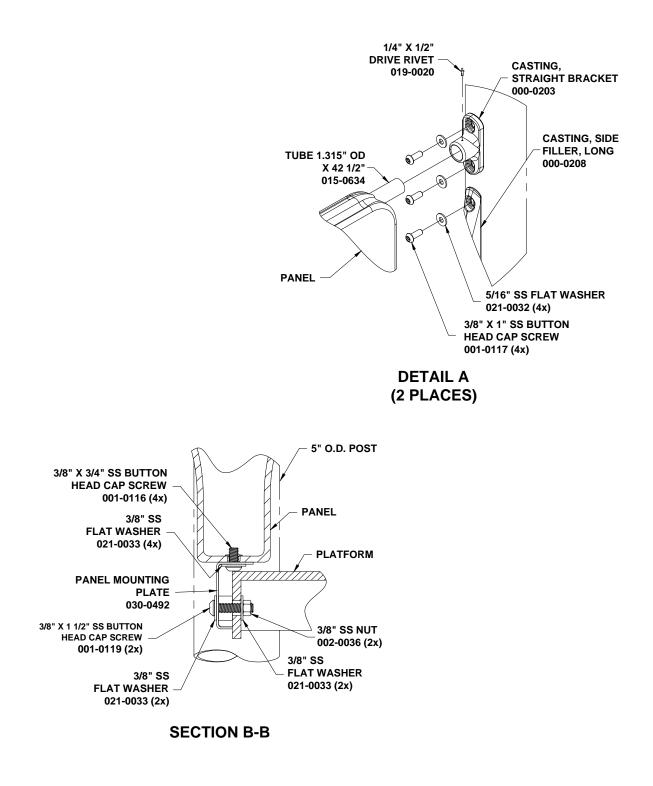






570-0798 WAVER PANEL, ABOVE PLATFORM





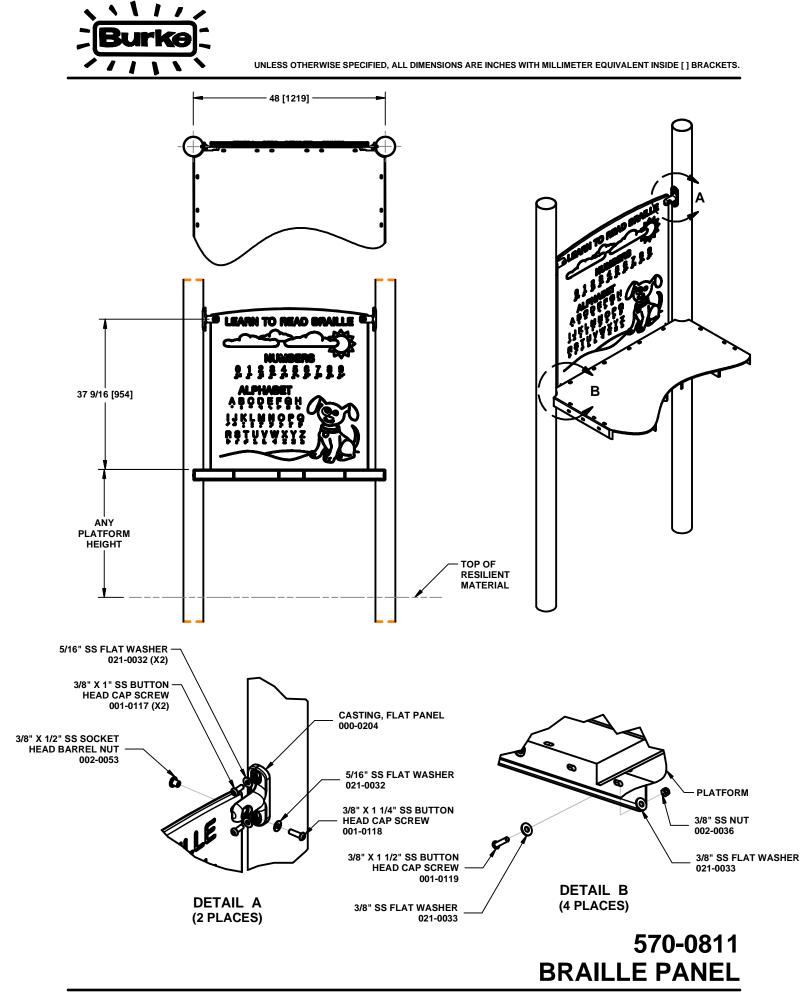
570-0798 WAVER PANEL, ABOVE PLATFORM

	PARTS LIST		SPECIFICATIONS
<u>PART NO.</u> 000-0203	DESCRIPTION CASTING, STRAIGHT BRACKET	<u>QTY</u> 2	<u>CASTING, STRAIGHT BRACKET</u> : A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
000-0208 015-0634 030-0492 036-1168 049-1718	CASTING, SIDE FILLER, LONG TUBE 1.315" OD X 42 1/2" PANEL MOUNTING PLATE HARDWARE PACKAGE WAVER PANEL ASSEMBLY	2 1 1 1 1	CASTING, SIDE FILLER, LONG: A56 Aluminum. Finished with baked on powder coating. <u>TUBE 1.315" OD X 42 1/2"</u> : 1.315" O.D. GALV TUBING <u>PANEL MOUNTING PLATE</u> : One piece all welded
			construction consisting of 10 GA and 14 GA galvanized steel plates. Finished with a baked on powder coating. <u>HARDWARE PACKAGE</u> : Aluminum rivets and stainless steel
			screws, nuts, and washers.
			WAVER PANEL ASSEMBLY: Assembly consisting of a 1/4" LLDPE double wall rotationally molded panel, 1/4" clear polycarbonate window, 1/2" extruded HDPE, extruded HDPE and acetal and stainless steel balls all assembled together with stainless steel hardware.
	vare package(s) may include extra hardvecessary for this installation.	ware	SHIPPING WEIGHT: 62 LBS.
			SHIPPING WEIGHT: 62 LBS.

# INSTALLATION INSTRUCTIONS

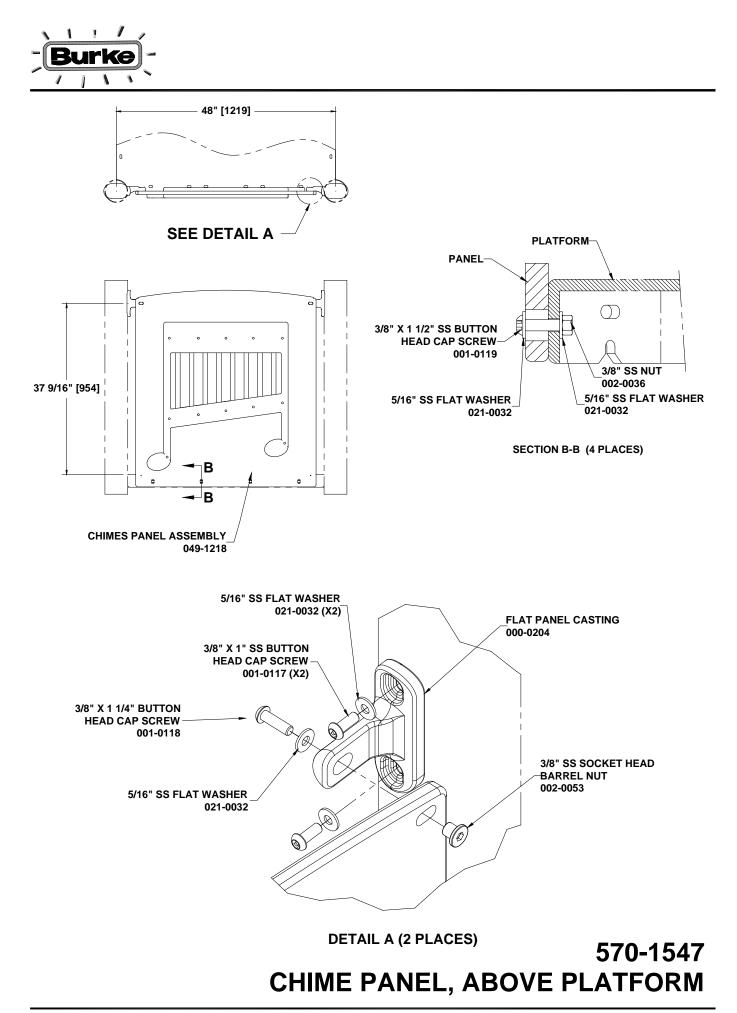
#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Attach PANEL MOUNTING PLATE to WAVER PANEL using 3/8" x 3/4" SS button head cap screws and 3/8"SS flat washers. See SECTION B-B.
- Attach SIDE FILLER CASTINGS to post using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 3. Sleeve TUBE 1.315" OD X 42 1/2" into panel. See DETAIL A.
- Position panel assembly on 5" OD posts and fasten upper hole of CASTING BRACKETS to 5" OD posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 5. Rotate panel assembly up 90 degrees and fasten lower hole in casting brackets to 5" OD posts with 3/8" x 1" SS button head cap screw and 5/16" SS flat washers. See DETAIL A.
- 6. Tighten hardware.
- Rotate panel down to the platform and fasten mounting plate to platform using 3/8" x 1 1/2" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. Tighten hardware. See SECTION B-B.
- 8. Drill 1/4" hole through casting and into tube, drive rivet flush with casting. See DETAIL A.
- 9. Apply touch up paint to drive rivet head.
- 10. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



Telephone 920-921-9220

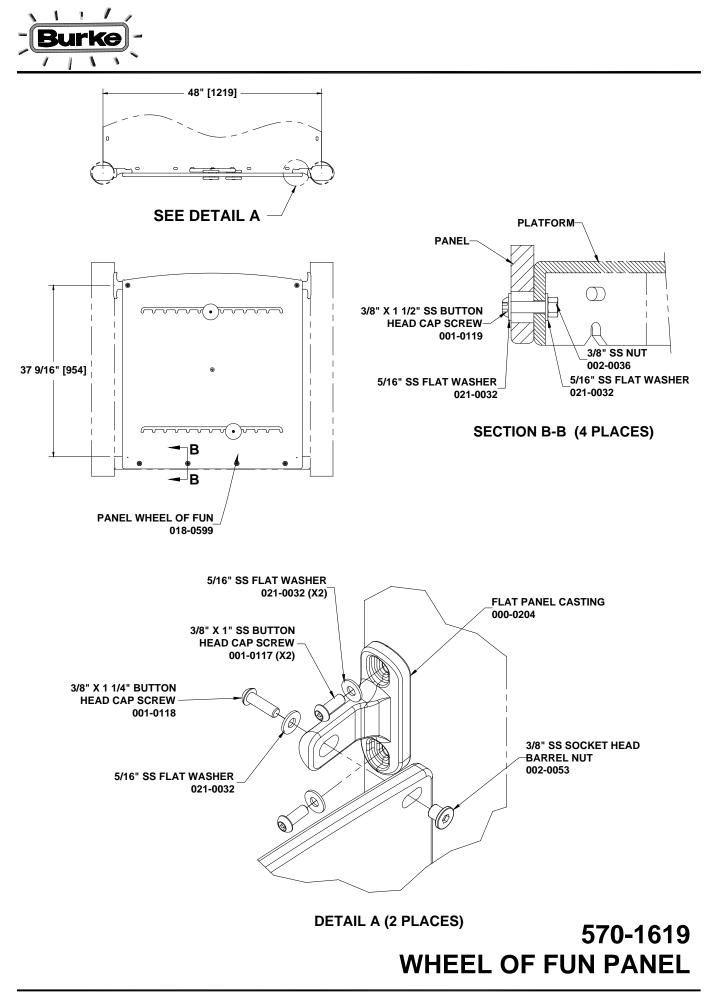
PARTS LIST	SPECIFICATIONS
PART NO. DESCRIPTION QTY	CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.
000-0204 CASTING, FLAT PANEL 2	Finished with baked on powder coating.
036-1241 HARDWARE PACKAGE 1	HARDWARE PACKAGE: Stainless steel
049-1727 BRAILLE PANEL ASSEMBLY 1	BRAILLE PANEL ASSEMBLY: Assembly consisting of
	3/4" co-extruded HDPE and u drive screws.
NOTE: Hardware package(s) may include extra hardware	
that is not necessary for this installation.	SHIPPING WEIGHT: 54 LBS.
NOTE: DVC conting movement to be removed from movement	a belos of porto before installation
NOTE: PVC coating may need to be removed from mountin NOTE: Do not tighten hardware until instructed to do so.	y noies or parts before installation.
1. Determine location of BRAILLE PANEL assembly.	
<ol> <li>Attach CASTING, FLAT PANEL to posts using hardware spe</li> <li>Attach BRAILLE PANEL ASSEMBLY to flat panel castings using the spectrum of th</li></ol>	
4. Attach panel assembly to platform using hardware specified i	
5. Level panel assembly and tighten all hardware.	
6. Install resilient material in accordance to installation guid	delines, ASTM standards and CPSC guidelines.



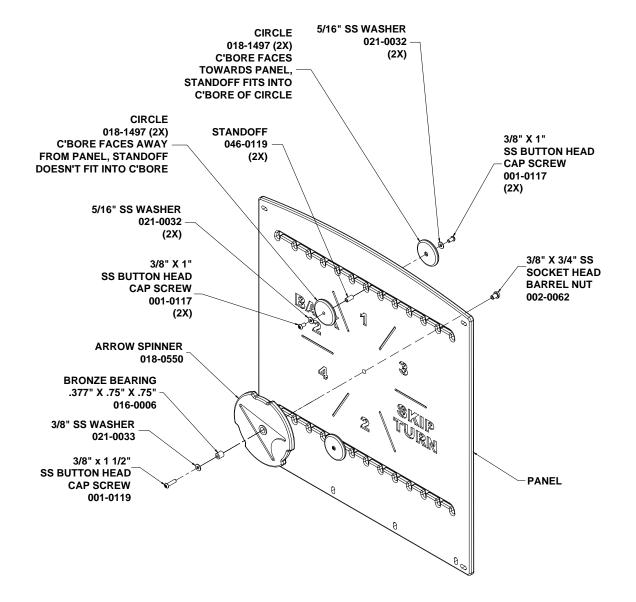
	— PARTS LIST —	1	SPECIFICATIONS
PART NO. 000-0204 036-1241 049-1218	PARTS LIST DESCRIPTION CASTING, FLAT PANEL HARDWARE PACKAGE CHIMES PANEL ASSEMBLY	<u>QTY</u> 2 1 1	SPECIFICATIONS         CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.         Finished with baked on powder coating.         HARDWARE PACKAGE: Stainless steel         CHIMES PANEL ASSEMBLY: Assembly consisting of 3/4"         extruded H.D.P.E. panels, 1" OD x .049" wall stainless steel         tubes, 1/16" diameter stainless steel wire rope, zinc plated         steel washers, zinc plated copper compression sleeves, and         stainless steel screws, T-nuts & 3/8" washers.
Note: Hardv that is not n	vare package(s) may include extra h ecessary for this installation.	ardware	SHIPPING WEIGHT: 60 LBS.
	INS	TALLATION I	

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 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 CHIMES PANEL to the 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.
- 3. Insert 3/8" SS socket head barrel nuts into holes of panel.
- 4. Attach panel to castings using 3/8" x 1 1/4" SS button head cap screws, 5/16" SS flat washers, and 3/8" SS socket head barrel nuts.
- 5. Level panel and tighten all hardware.
- 6. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.







**EXPLODED ASSEMBLY VIEW** 

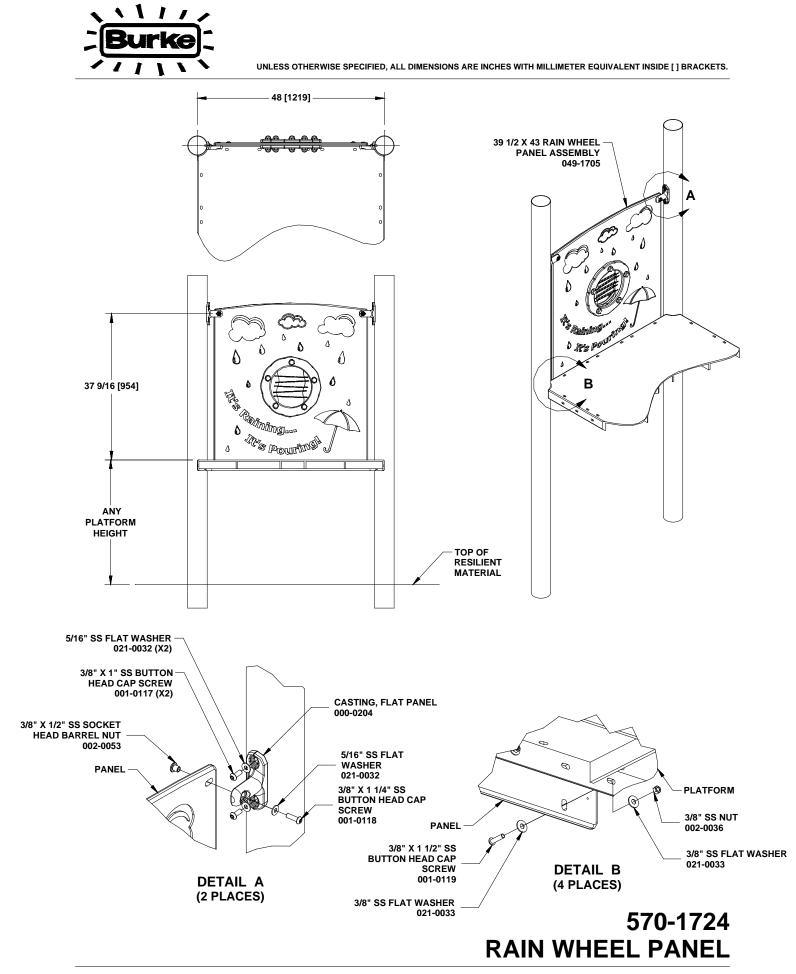


	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.
000-0204 016-0006	CASTING, FLAT PANEL BRONZE BEARING .377" X .75" X	2 1	Finished with baked on powder coating.
	.75"		BRONZE BEARING .377" X .75" X .75": Oil impregnated, bronze.
018-0550 018-0599	ARROW SPINNER PANEL, WHEEL OF FUN	1	bionze.
018-1497 036-1261	CIRCLE HARDWARE PACKAGE	4	ARROW SPINNER; PANEL, WHEEL OF FUN: 3/4" co- extruded HDPE.
046-0119	STANDOFF	2	
			CIRCLE: 1/2" extruded HDPE
			HARDWARE PACKAGE: Stainless steel
			STANDOFF: 1/2" OD threaded stainless steel tubing.
	vare package(s) may include extra hardw	vare	
that is not no	ecessary for this installation.		SHIPPING WEIGHT: 51 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 FLAT PANEL CASTINGS to posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- 2. Attach PANEL to the 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.
- 3. Attach panel to mounting brackets using 3/8" x 1 1/4" SS button head cap screws, 5/16" SS flat washers, and 3/8" SS socket head barrel nuts. See DETAIL A.
- 4. Assemble individual CIRCLES to panel using 1/2" OD X 7/8" STANDOFF, 5/16" SS flat washers and 3/8" x 1" SS button head cap screws. See EXPLODED ASSEMBLY VIEW.
- 5. Test to make sure circle assembly slides freely, if not disassemble and flip one circle part around then reassemble. See EXPLODED ASSEMBLY VIEW.
- 6. Attach ARROW SPINNER to panel using BRONZE BEARING .377" X .75", X .75", 3/8" X 1 1/4" SS button head cap screw, 3/8" SS flat washer and 3/8" X 3/4" SS socket head barrel nut. See EXPLODED ASSEMBLY VIEW.
- 7. Tighten all hardware.
- 8. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



Telephone 920-921-9220

	PARTS LIST		SPECIFICATIONS
PART NO. 000-0204 036-1241 049-1705	PARTS LIST DESCRIPTION CASTING, FLAT PANEL HARDWARE PACKAGE 39 1/2 X 43 RAIN WHEEL PANEL ASSEMBLY	<u>QTY</u> 2 1	SPECIFICATIONS         CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.         Finished with baked on powder coating.         HARDWARE PACKAGE: Stainless steel         39 1/2 X 43 RAIN WHEEL PANEL ASSEMBLY: 3/4" co- extruded HDPE, 3/4" extruded HDPE, 1/2" extruded HDPE, injection molded HDPE bolt covers, polycarbonate windows, polycarbonate baffle plates, stainless steel balls, stainless steel ball bearings & stainless steel hardware.
	are package(s) may include extra hardvecessary for this installation.	vare	SHIPPING WEIGHT: 52 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.

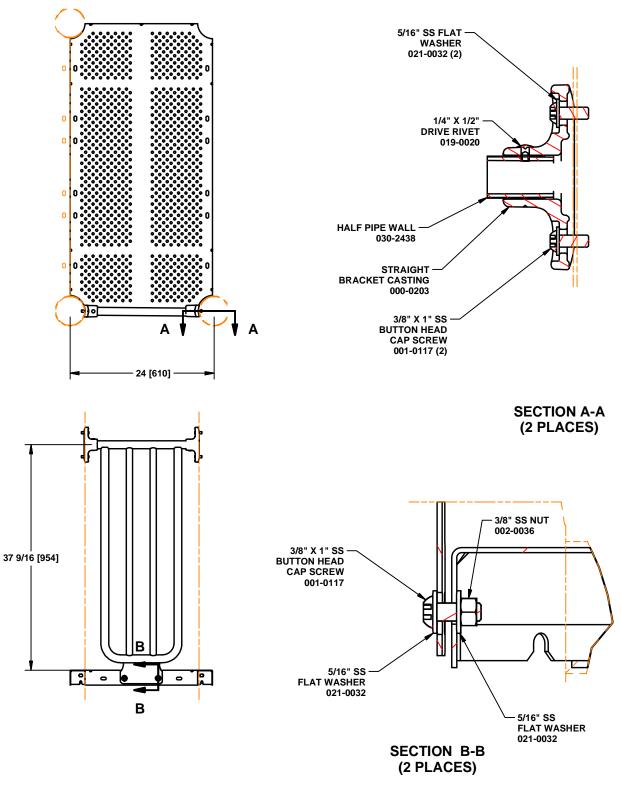
- 1. Determine location of RAIN WHEEL PANEL assembly.
- 2. Attach CASTING, FLAT PANEL to posts using hardware specified in DETAIL A.
- 3. Attach 39 1/2 X 43 RAIN WHEEL PANEL ASSEMBLY to flat panel castings using hardware specified in DETAIL A.
- 4. Attach panel assembly to platform using hardware specified in DETAIL B.
- 5. Level panel assembly and tighten all hardware.
- 6. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

570-1724.doc Description: RAIN WHEEL PANEL

REV: 01 PCN: 14-0029 2/28/2014







570-2624 HALF PIPE WALL ASSEMBLY

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

	💻 PARTS LIST 💳		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat-
000-0203 CAS	STING, STRAIGHT BRACKET	2	Treated. Finished with baked on powder coating.
030-2438 HAL	F PIPE WALL	1	HALF PIPE WALL: One piece all welded construction consisting
036-0258 HAF	RDWARE PACKAGE	1	of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14
036-0819 HAF	RDWARE PACKAGE	1	GA galvanized steel tubing. Finished with a baked on powder
036-0870 HAF	RDWARE PACKAGE	1	coating.
			HARDWARE PACKAGE: Aluminum Rivets
			HARDWARE PACKAGE: Stainless steel screws, washers & nuts, nylon washers and zinc plated steel lock washer.
			HARDWARE PACKAGE: Stainless steel.
	are package(s) may include extra ha ssary for this installation.	rdware	SHIPPING WEIGHT: 19.6 LBS.

#### **INSTALLATION INSTRUCTIONS**

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

1. Slide BRACKETS onto tube on HALF PIPE WALL.

2. Attach BRACKETS with pipe wall to 5" OD post using 3/8" x 1" SS button head cap screws and 5/16" SS washers. See SECTION A-A.

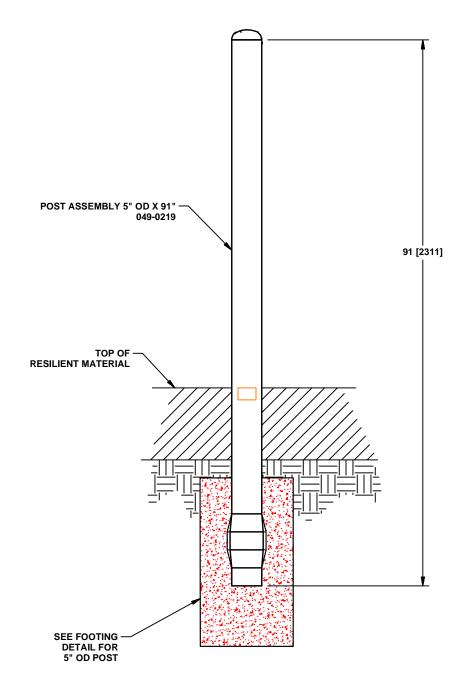
3. Attach bottom of pipe wall to platform using 3/8" x 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. Tighten all hardware. See SECTION B-B.

4. Drill 1/4+diameter holes through pilot hole, into pipe wall and through mounting bracket. See SECTION A-A.

5. Drive rivets flush with brackets and pipe wall.

6. Tighten All Hardware.



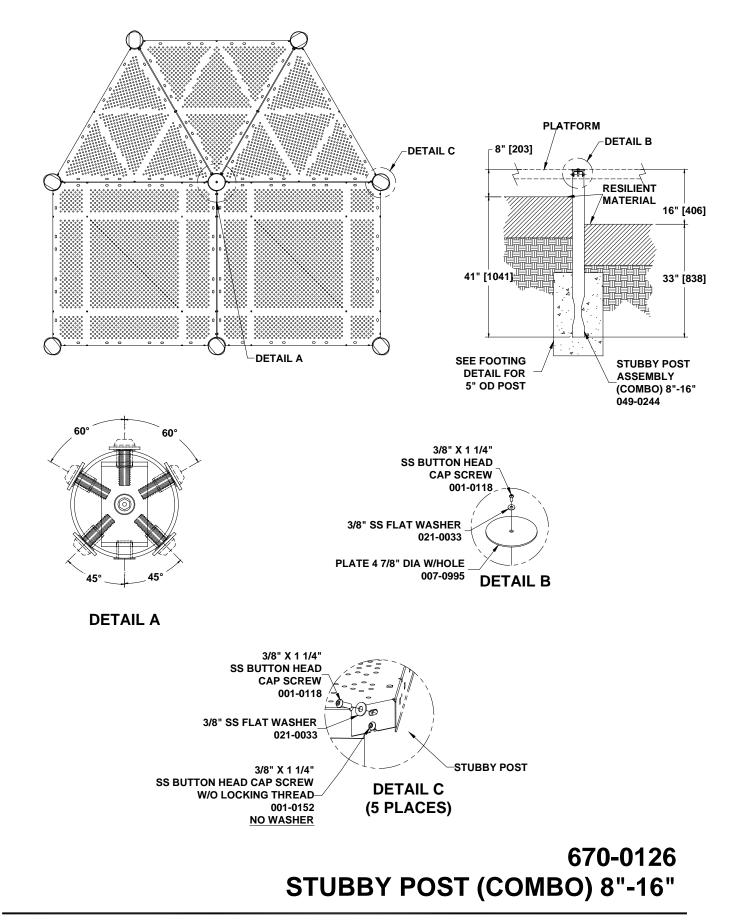


# 670-0001 POST ASSEMBLY 5" OD X 91"

	PARTS LIST	]	SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	POST ASSEMBLY 5" OD X 91": Assembly consisting of 5" OD
049-0219	POST ASSEMBLY 5" OD X 91"		x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	ardware package(s) may include extra necessary for this installation.	hardware	SHIPPING WEIGHT: 49 LBS.
		<b>FALLATION</b>	
		l dig footing	INSTRUCTIONS hole as per typical concrete footing drawing, manual.
which is	mine 5+OD post location and	l dig footing r installatior	hole as per typical concrete footing drawing, manual.
which is 2. Insert	mine 5+OD post location and located in the preface of you	l dig footing r installatior -up and plu	hole as per typical concrete footing drawing, manual.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.

670-0001 POST ASSEMBLY 5" OD X 91" REV: 02 PCN: 16-0257 12/5/2016





		1	
PART NO. 007-0995 036-1198 049-0244	PARTS LIST DESCRIPTION PLATE 4 7/8" DIA W/HOLE HARDWARE PACKAGE STUBBY POST ASSEMBLY (COMBO) 8"-16"	<u>QTY</u> 1 1	SPECIFICATIONS PLATE 4 7/8" DIA W/HOLE: 14 GA HRPO, PVC Dipped. HARDWARE PACKAGE: Stainless steel STUBBY POST ASSEMBLY (COMBO) 8"-16": 5" OD Galv. Tube, 10 GA Galv. Sheet. Finished with a baked on powder coating.
	vare package(s) may include extra ecessary for this installation.	a hardware	SHIPPING WEIGHT: 26 LBS.

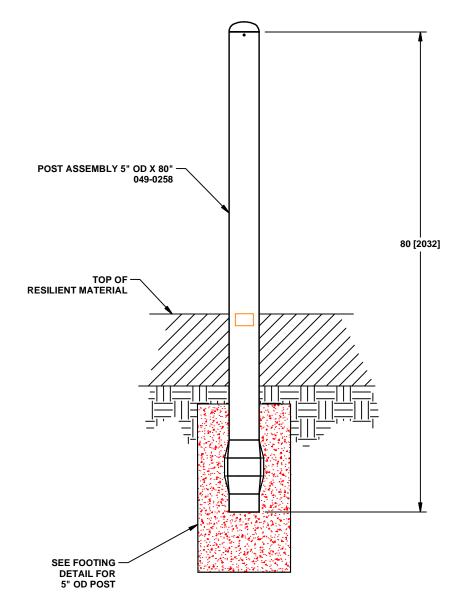
### INSTALLATION INSTRUCTIONS

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 stubby 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 & C.
- 3. Slide the corners of the platforms 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 & C.
- Attach 4 7/8" DIA. PLATE to top of stubby post using 3/8" x 1 1/4" SS button head cap screws and 3/8" SS flat washer. See DETAIL B.
- 6. Level platform and plumb posts.
- 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.

670-0126.doc Description: STUBBY POST (COMBO) 8"-16" REV: 01 PCN: 14-0070 5/9/2014





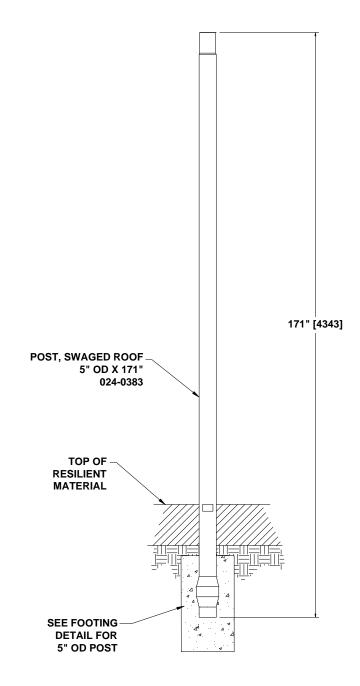


PART NO.	DESCRIPTION	QTY	SPECIFICATIONS POST ASSEMBLY 5" OD X 80": Assembly consisting of 5" OD
	POST ASSEMBLY 5" OD X 80"		x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	Irdware package(s) may include extra ha necessary for this installation.		SHIPPING WEIGHT: 43 LBS.
	-	lig footing	hole as per typical concrete footing drawing,
2. Insert	post into footing hole. Block-u	p and plur	nb post.
3. Pour c	oncrete and let set 2 - 3 days.		
	resilient material in accorda uidelines.	ance to in	stallation guidelines, ASTM standards and

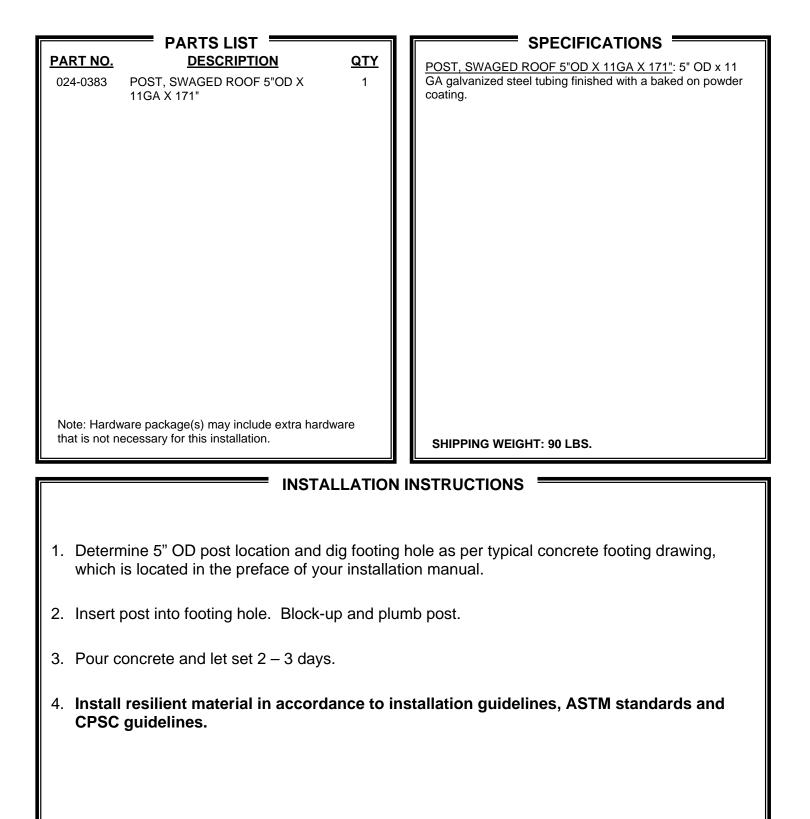
670-0150 POST ASSEMBLY 5" OD X 80" REV: 02 PCN: 16-0257 12/5/2016



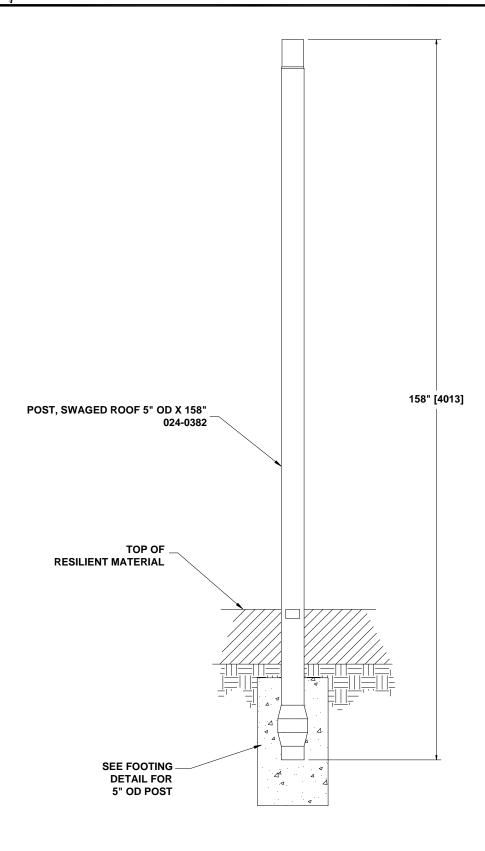




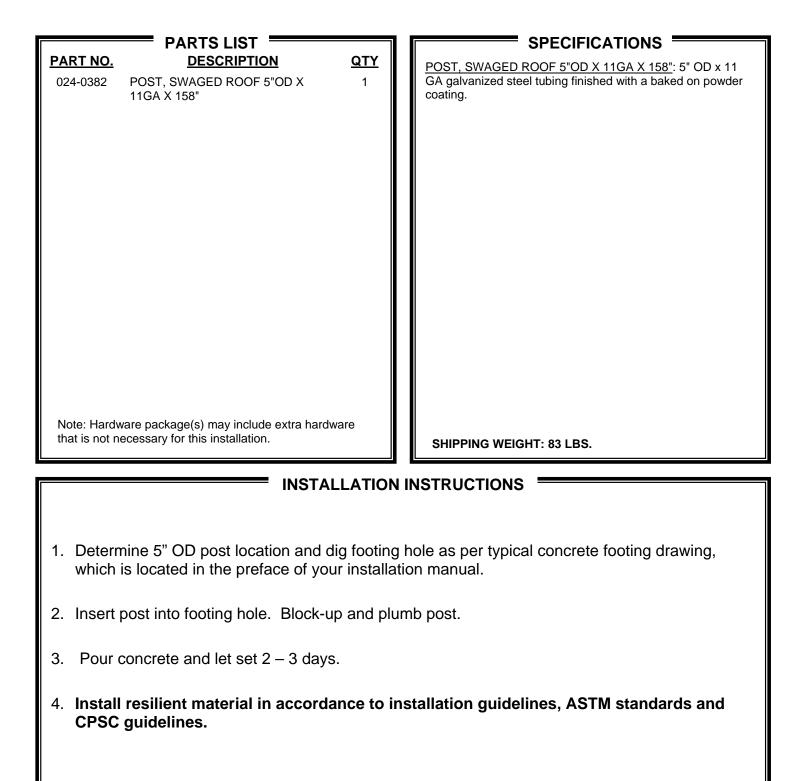
670-0161 SWAGED ROOF POST 5" OD X 171"



670-0161.doc Description: POST, SWAGED ROOF 5" OD X 171" REV: 01 PCN: 10-0339 10/22/2010

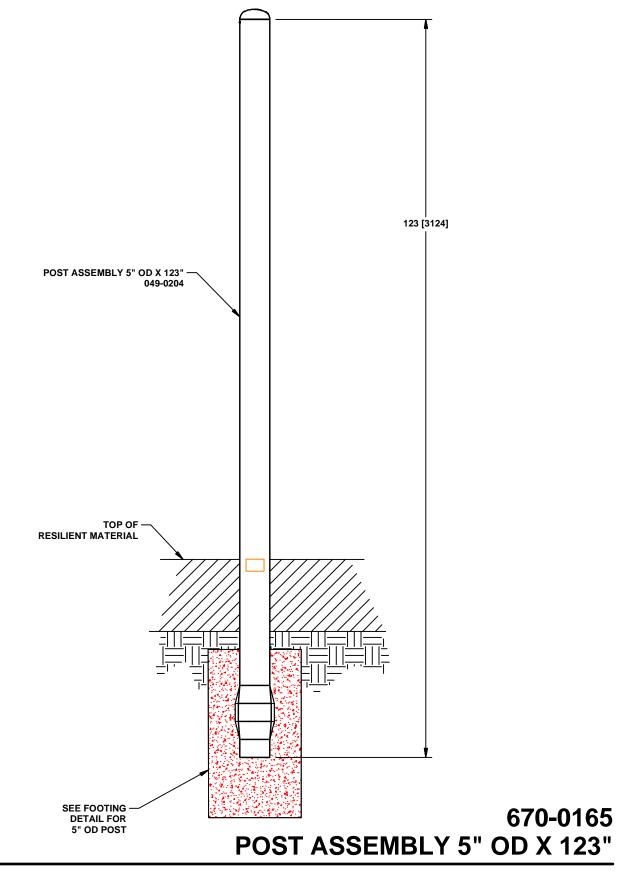


670-0164 SWAGED ROOF POST 5" OD X 158"



670-0164.doc Description: POST, SWAGED ROOF 5" OD X 158" REV: 01 PCN: 10-0339 10/22/2010

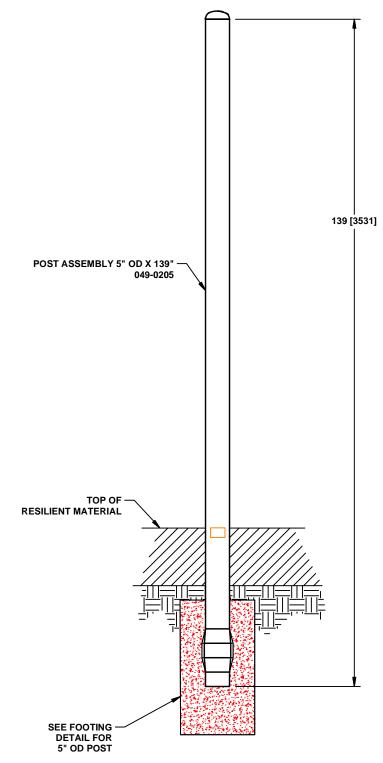




P.O. Box 549 Fond du Lac, WI 54936-0549

PART NO.	DESCRIPTION	QTY	SPECIFICATIONS
PART NO.           049-0204	DESCRIPTION POST ASSEMBLY 5" OD X 123"		POST ASSEMBLY 5" OD X 123": Assembly consisting of 5" OD x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	ardware package(s) may include extra ha necessary for this installation.		
	-	ig footing	g hole as per typical concrete footing drawing,
2. Insert	post into footing hole. Block-u	p and plu	umb post.
3. Pour c	concrete and let set 2 - 3 days.		
	l resilient material in accorda uidelines.	ance to ii	installation guidelines, ASTM standards and



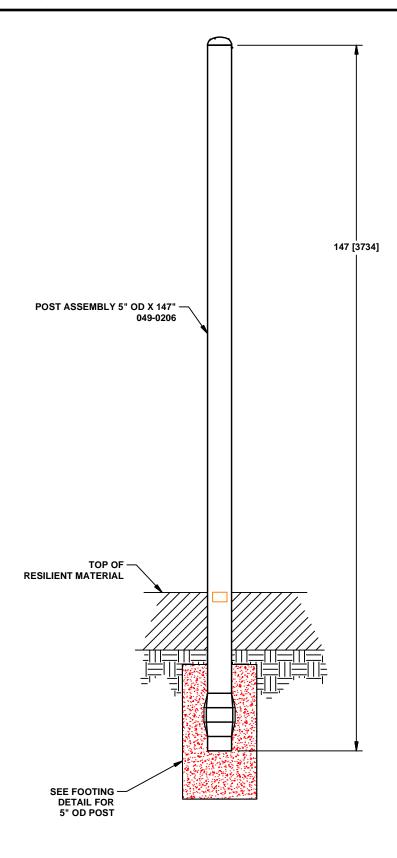


670-0166 POST ASSEMBLY 5" OD X 139"

PART NO.	DESCRIPTION	QTY	SPECIFICATIONS
	DESCRIPTION           POST ASSEMBLY 5" OD X 139"		POST ASSEMBLY 5" OD X 139": Assembly consisting of 5" OD x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	ardware package(s) may include extra h necessary for this installation.		SHIPPING WEIGHT: 74 LBS.
1. Deterr which is	nine 5+OD post location and located in the preface of your	dig footing installatio	hole as per typical concrete footing drawing, n manual.
2. Insert	post into footing hole. Block-	up and plu	imb post.
3. Pour c	concrete and let set 2 - 3 days		
	l resilient material in accord uidelines.	ance to ir	nstallation guidelines, ASTM standards and

670-0166 POST ASSEMBLY 5" OD X 139" REV: 02 PCN: 16-0257 12/5/2016

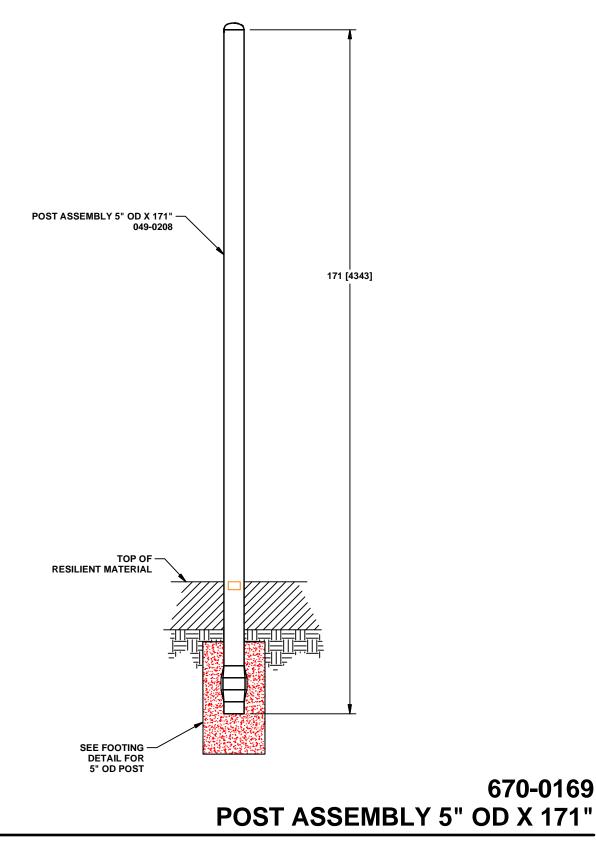




670-0167 POST ASSEMBLY 5" OD X 147"

	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	POST ASSEMBLY 5" OD X 147": Assembly consisting of 5" OD
049-0206	POST ASSEMBLY 5" OD X 147"		x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	ardware package(s) may include extra necessary for this installation.		SHIPPING WEIGHT: 78 LBS.
		<b>FALLATION</b>	
1. Deterr which is	mine 5+OD post location and located in the preface of you	d dig footing Ir installatior	hole as per typical concrete footing drawing, manual.
which is	mine 5+OD post location and located in the preface of you post into footing hole. Block	ir installation	n manual.
which is 2. Insert	located in the preface of you	r installation	n manual.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour c</li><li>4. Install</li></ul>	located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day	r installatior -up and plui /s.	n manual.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour c</li><li>4. Install</li></ul>	located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accor	r installatior -up and plui /s.	n manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour c</li><li>4. Install</li></ul>	located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accor	r installatior -up and plui /s.	n manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour c</li><li>4. Install</li></ul>	located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accor	r installatior -up and plui /s.	n manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour c</li><li>4. Install</li></ul>	located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accor	r installatior -up and plui /s.	n manual. mb post.

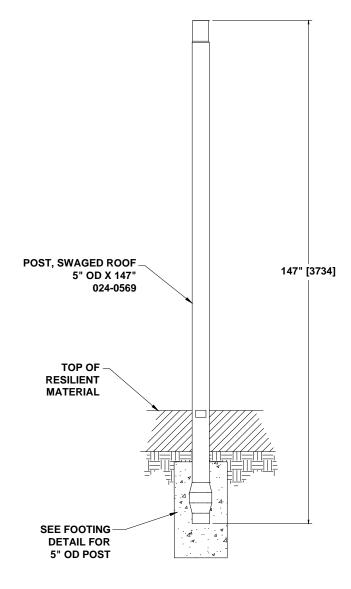




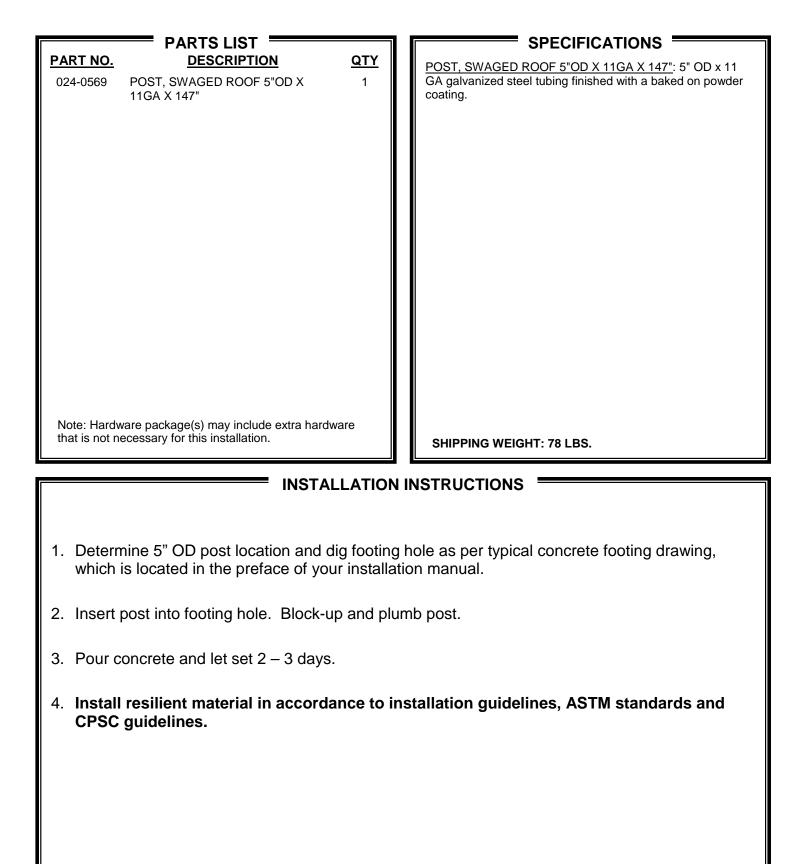
PART NO.	PARTS LIST DESCRIPTION	QTY	SPECIFICATIONS POST ASSEMBLY 5" OD X 171": Assembly consisting of 5" OD
PART NO. 049-0208	DESCRIPTION POST ASSEMBLY 5" OD X 171"		POST ASSEMBLY 5" OD X 171": Assembly consisting of 5" OD x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	ardware package(s) may include extra necessary for this installation.		SHIPPING WEIGHT: 91 LBS.
	INST	<b>FALLATION</b>	INSTRUCTIONS
	mine 5+OD post location and located in the preface of you		hole as per typical concrete footing drawing, manual.
2. Insert	post into footing hole. Block	-up and plur	nb post.
3. Pour c	concrete and let set 2 - 3 day	'S.	
	I resilient material in accor uidelines.	dance to in	stallation guidelines, ASTM standards and

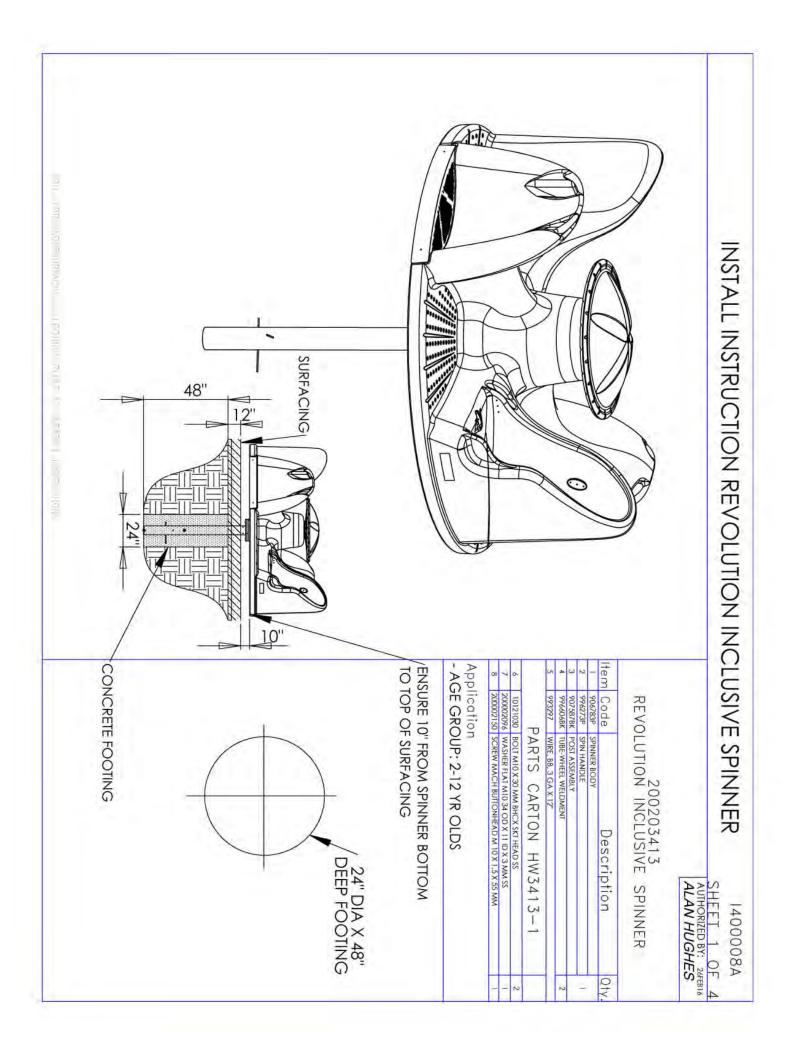
670-0169 POST ASSEMBLY 5" OD X 171" REV: 02 PCN: 16-0257 12/5/2016



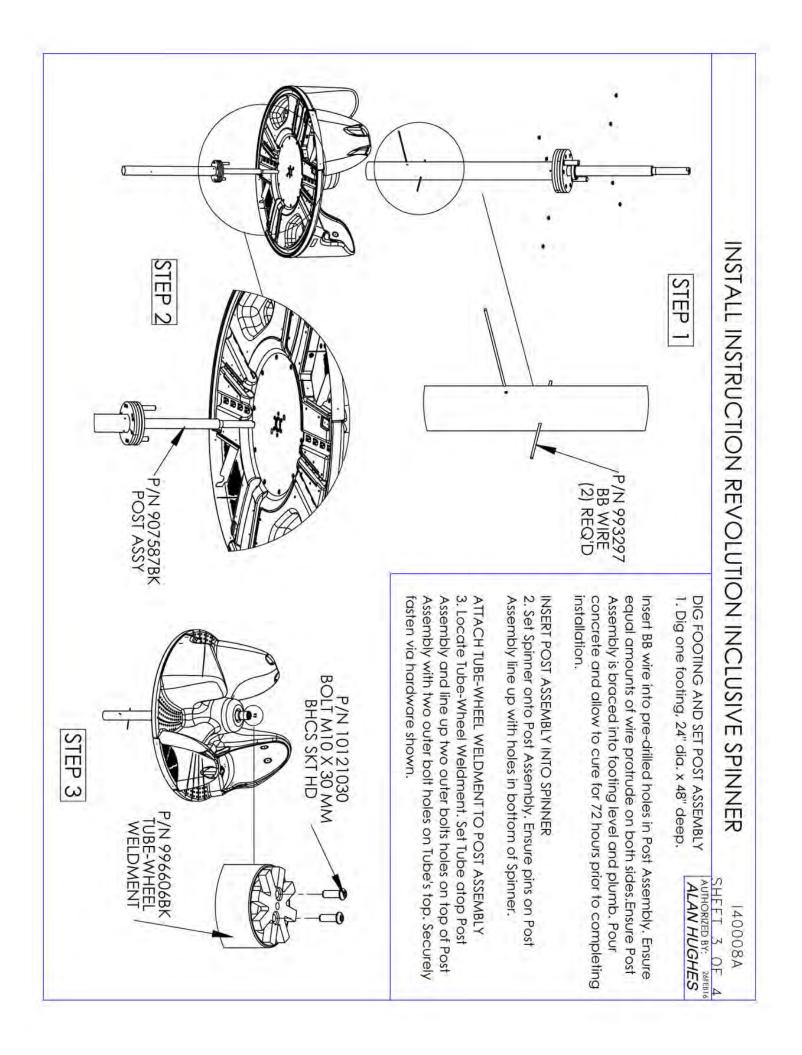


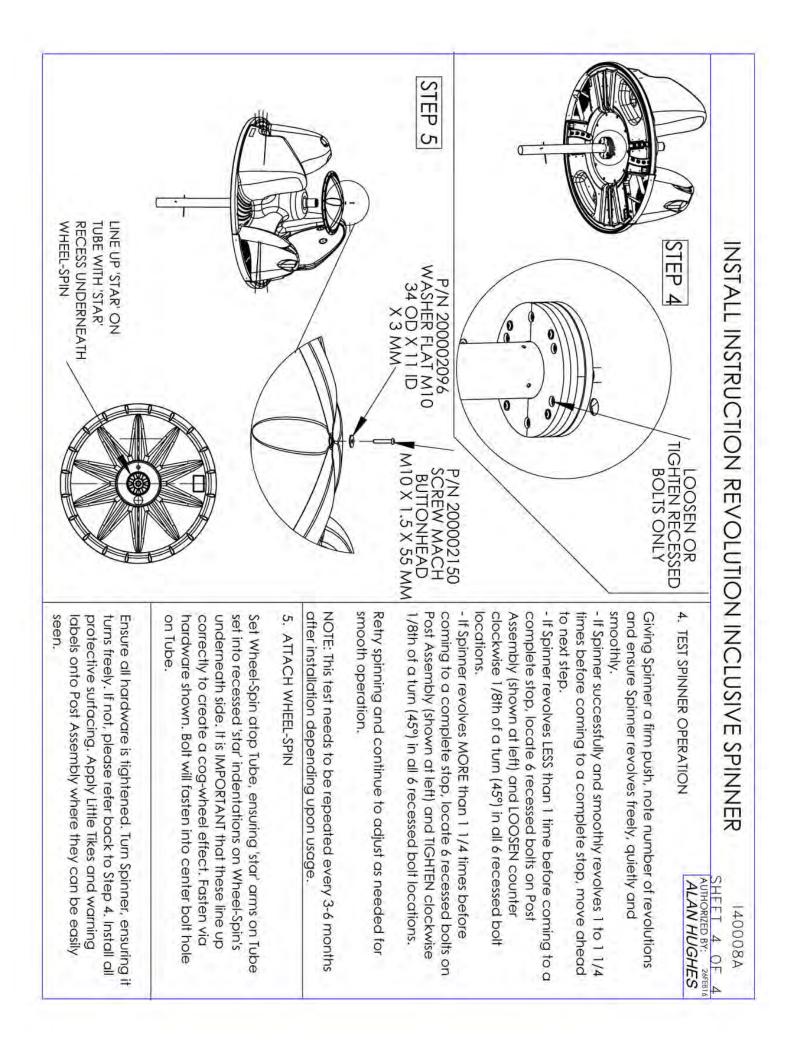
670-0172 POST, SWAGED ROOF 5" OD X 147"

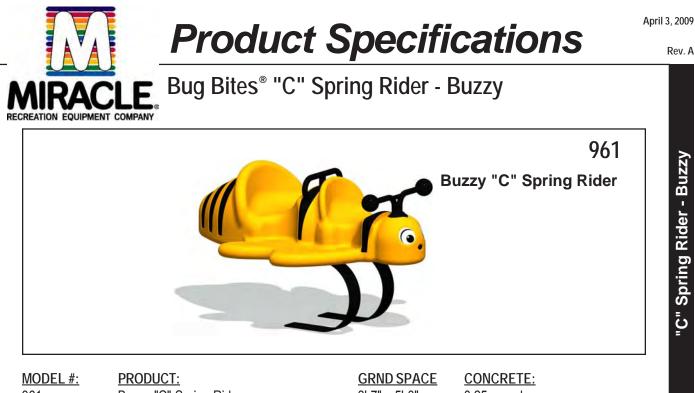




ALL CHILDREN SHOULD BE SUPERVISED WHILE PLAYING ON EQUIPMENT.	The area immediately surrounding and above the play structure must be free of obstructions such as: buildings, trees, other play equipment, etc., and must be kept clear for entries, exits, traffic and falls. Make sure your site has the required surfacing and fall area designated on your Playground Layout Drawings.	All Little Tikes Commercial Play Systems playevents have been designed and engineered to meet all applicable safety guidelines, but if installed improperly, problems may occur such as: protruding hardware, entrapment gaps between 89mm [3.5"] to 229mm [9"], or string entanglements. Any accessible bolt ends that protrude beyond the face of the nut by more than two threads should be trimmed and peened smooth by the installer. Once your installation is complete, always inspect your work. Installation must be done to the manufacturer's assembly manual and applicable safety guidelines and/or standards.	As the owner, it is most important that you are aware of your responsibility for the safe use of your new play equipment. It is necessary to install equipment correctly according to the installation instructions provided and inspect the equipment regularly at intervals specified within the "Maintenance Manual," located in your maintenance kit. During inspection, if any part is found to be damaged or excessively worn, equipment should immediately be put out of service while the part is replaced. Lack of maintenance will result in premature wear, reduced life expectancy and possible failure.	<ul> <li>The site must be checked for adverse or unusual conditions. i.e.</li> <li>Exposed, cracked or loose concrete footings.</li> <li>Worn, scattered or compressed surface material.</li> <li>Exposed roots, rocks or other environmental obstacles that form potential trip hazards.</li> <li>Broken glass, refuse, or foreign objects around and on play equipment.</li> <li>Poor drainage areas.</li> <li>All sites especially those close to existing buildings must be checked for electrical or gas lines and drainage before digging.</li> </ul>	This playevent is designed to suit a level site. Should there be any slopes on the site, care should be taken to accommodate the entry and exit points and to maintain the correct heights.	BEFORE STARTING INSTALLATION OF YOUR LITTLE TIKESCOMMERCIAL PRODUCT PLEASE READ INSTRUCTIONS THOROUGHLY		
						ינראוע הטטחבט	I400008A SHEET 2 OF 4 AUTHORIZED BY: 26FEBIG	







961

Buzzy "C" Spring Rider

3'-7" x 5'-0"

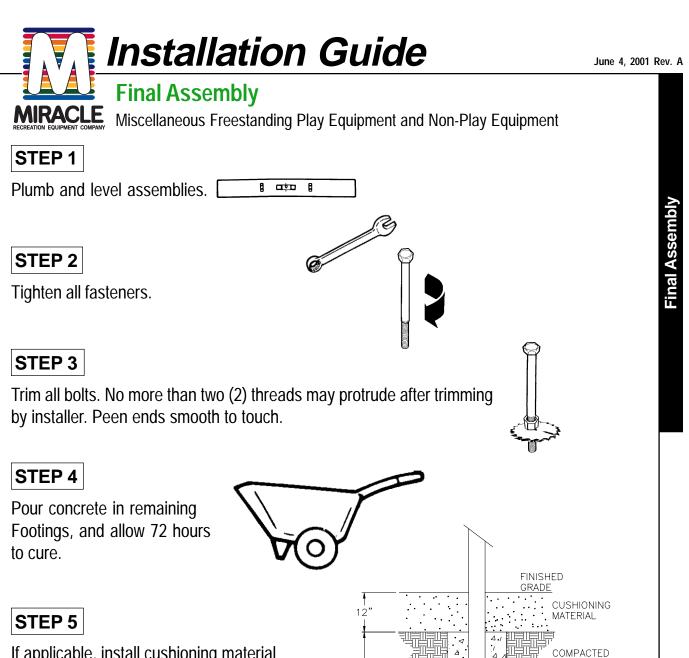
0.25 cu. yds.

### **DESCRIPTION:**

This "C" Spring Rider is designed to provide children with an engaging, fun and safe physical activity that stimulates imaginative play while encouraging sharing and cooperation. "C" Spring Riders feature traditional "rocking horse" type movement using two "flat strip" style springs, formed into a "C" shape. Model # 961 is shaped like a bumblebee.

Rider Body:	The rider body shall consist of a <u>Rockite</u> figure supported by a body frame. Wall thickness of molded components shall be $3/16$ " to $1/4$ ". The body frame shall consist of front and/or rear supports constructed of <u>1-1/2</u> " tube and/or of 2" x 2" x 1/4" angle, a cross member constructed of <u>1-1/4</u> " pipe, handholds of 1" (1" O.D.) 15 ga. tube and/or <u>Gator Grip</u> , a cross brace of <u>3/4" x 1" oval tube</u> and <u>Gator Grip</u> , a mount of 1/4" x 1-1/2" flat or 1/4" plate, and a base and gussets constructed of 7 ga. sheet, all solid <u>welded</u> .
"C" Spring:	The "C" springs shall be constructed of 3/8" or 7/16" spring steel, 4" wide by approximately 41-1/2" long, bent 180 degrees to form a large "C".
Pinch Plate:	Pinch Plates shall be constructed of 1/4" flat sheet.
Base Weldment:	Base Weldments shall comprise an anchor plate constructed of 1/8" x 2" flat sheet, a bracket of 7 ga. sheet, and a center tube constructed of <u>5" tube</u> , all solid <u>welded</u> .
Fasteners:	All hardware shall be Fastener style A.
Finish:	The <u>Rockite</u> rider bodies shall have color molded in. Buzzy shall have molded in color for the stripes and molded in decals for the eyes. Handholds shall have a galvanized finish. The "C" springs shall be finished in <u>Mira-Cote</u> ™.
Consu	It the Glossary of Technical Data for Materials, Processes and Finishes of the underlined items.

961



If applicable, install cushioning material (protective surfacing) in, around, and beneath areas required for unit.

### STEP 6

If applicable, apply *Age Appropriate, Warning,* and *Manufacturer's I.D.* labels. Refer to *Installations 101.* 

FOOTING

DEPTH

### FINAL STEP

Establish and adhere to a regular maintenance schedule, checking for loose or missing bolts, worn parts, etc.



SOIL

CONCRETE

FOOTING

1

FOOTING

DIA

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

#### **Installation Guidelines**

• Identify all parts and thoroughly read the assembly instructions before beginning construction.

• Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and noencroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

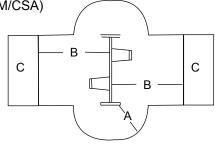
#### (ASTM / CSA)

• For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. The use zone on the sides of the swing should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

• For enclosed infant swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the measurement from the pivot point to the swing seat surface measured from a point directly beneath the pivot on the supporting structure. The use zone on the ends of the swing (support structure) should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

#### Belt/Rigid Seat Swing Zones (ASTM/CSA)

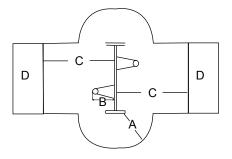
- **A** = Side Use Zone 72 in. (1829 mm)
- B = End Use Zone Height of Pivot Point from Surfacing x 2 Both Sides of Top Rail
- C = No-encroachment Zone 72 in. (1829 mm)



• The use zone on either end of the swing (72 inches [1829 mm]) may be overlapped by the use zone on either end of the another swing (72 inches [1829 mm]). Swing zones on either side of the top rail may **not** be overlapped by the use zones of other play equipment.

### Infant Seat Swing Zones

- A = Side Use Zone 72 in. (1829 mm)
- **B** = Distance from Pivot Point to Swing Seat Surface
- C = End Use Zone: B x 2 Both Sides of Top Rail
- D = No-encroachment Zone 72 in. (1829 mm)





### (EN)

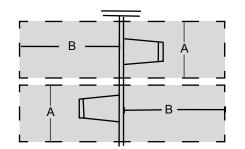
• For areas conforming to the EN-1176 Standard, the impact area shall be determined by calculating the horizontal distance where the swing seat is at an 60° arc and adding the appropriate amount of distance based upon the type of protective surfacing. This distance shall be covered by protective surfacing on both sides of the top rail. The protective surfacing shall be appropriate for the maximum fall height of the swing. There is no difference in the calculation based on the type of swing seat.

The impact area on both sides of top rail =  $(0.867 \times \text{Distance from pivot point}) + \underline{either}$  1750 mm if unitary surfacing <u>or</u> 2250 mm if loose-fill surfacing is used. There shall be a minimum corridor of 1750 mm centered on each swing seat for the length of the impact area.

#### **Use Zones - EN Compliance**

- A = Width of the corridor centered on the swing seat 1750 mm
- **B** = Length of the use zone on both sides of the top rail (8ft) Tot Seats: 3290 mm for unitary surfaced areas

or 3790 mm for areas covered with loose fill surfacing. Belt / Rigid Seats: 3510 mm for unitary surfaced areas or 4010 mm for areas covered with loose fill surfacing



• Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.

• Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.

• After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.

• Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.

• Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.

• Insure that hard surface warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.

• **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.

• The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, <u>A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment</u>. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

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

### Maintenance

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

### **Supervision Guidelines**

• Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.

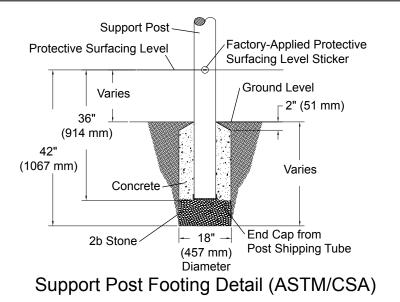
• Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.

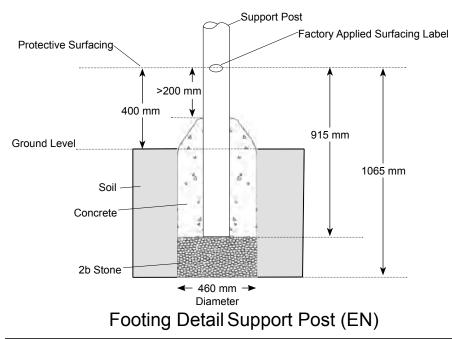
• It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.

• Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.

• Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.

• Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.





### FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete. *Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
   For example:
  - If local soil is loose or unstable, a larger footing may be required.

- If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.

- · Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

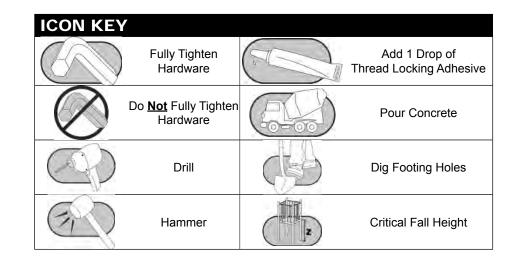




Playworld Systems<sup>®</sup> Model XX0287 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing 8 ft. (2438 mm) Top Rail

### **Installation Preparation**

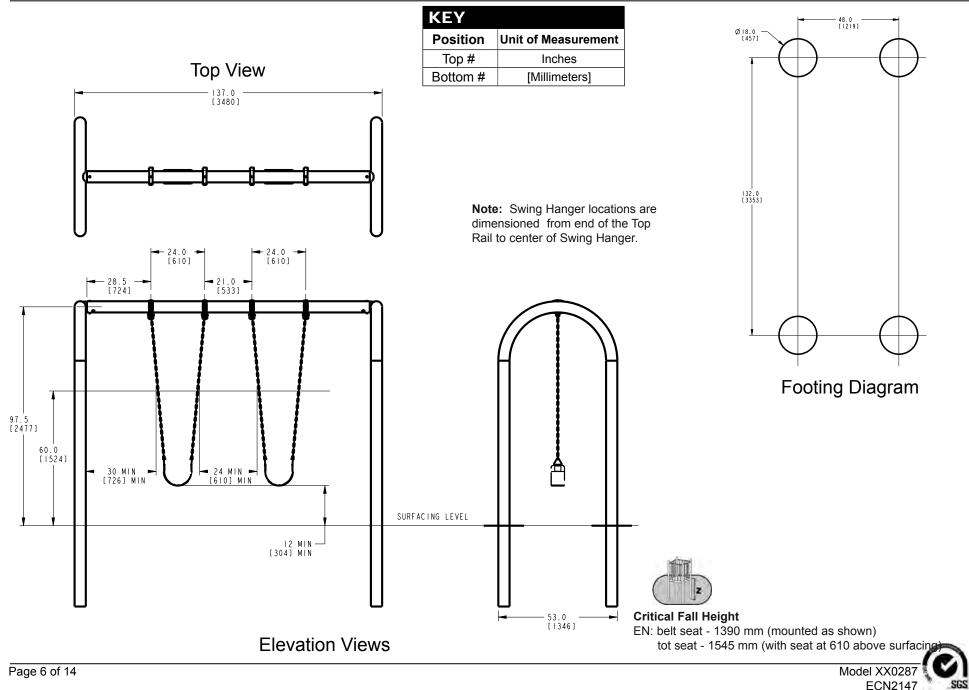
Recommended Crew:	Four (4) adults
Installation Time:	3 man-hours
Concrete Required:	0.48 cubic yard (0,37 cubic meters)
Use Zone:	Refer to Master Drawing
User Group Age (years):	ASTM/CSA: 2-12, EN: 2-14

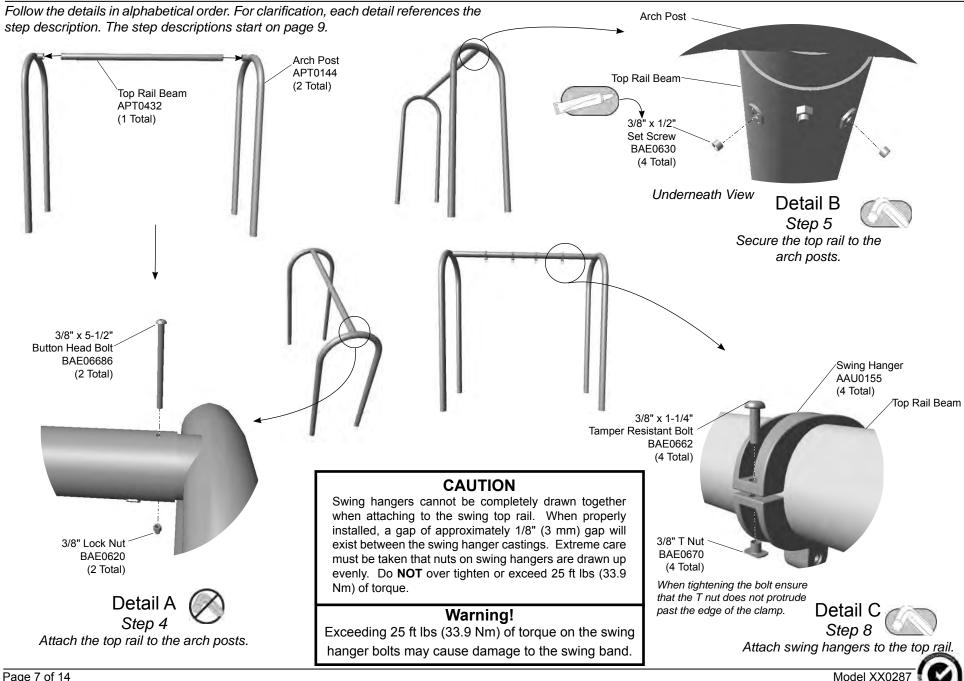




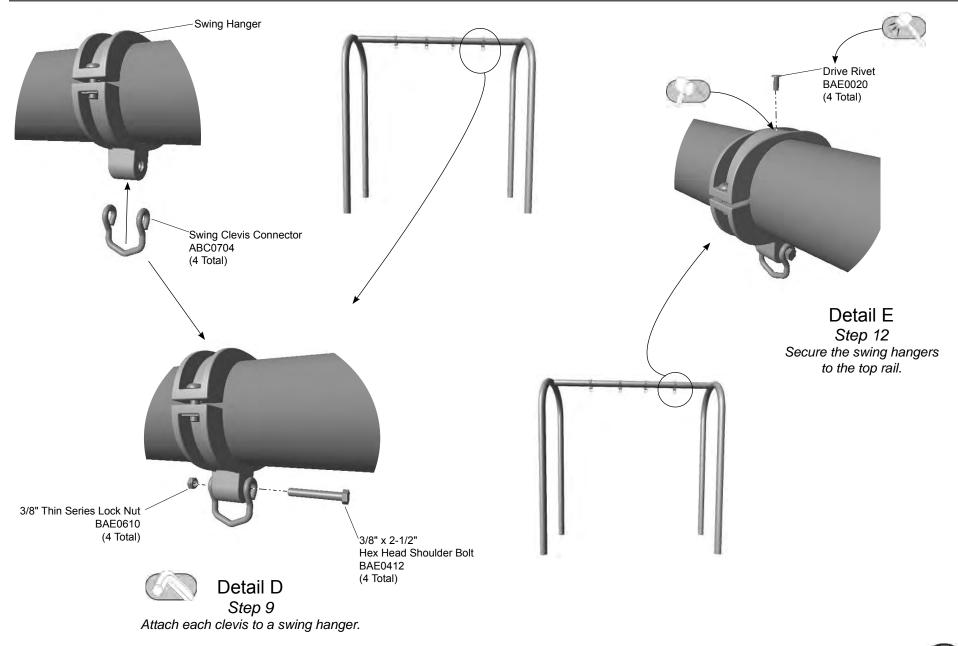


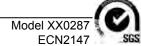
Assembly View (representative model)





ECN2147





**Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

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

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

Step 2: Separate and identify all components and hardware.

Step 3: Prepare footings as shown in the Support Post Details on Page 4.

### Assemble the swing frame.

**Step 4:** Attach the top rail to the arch support posts. See **Detail A**. Slide each end of the top rail into a post stub and align holes. Insert each bolt through the *top* hole in the post stub, through the top rail, out the bottom side of the post stub, and thread into a lock nut.

**Step 5:** Secure the top rail to the arch posts. See **Detail B**. Apply a drop of loctite to the set screw threads and thread each screw into a hole on the underside of the post stub. Fully tighten connections according to tightening torque specifications.

### **Torque Specifications:**

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

### Position the swing frame.

**Step 6:** Place the swing frame into the footings. Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) as measured from top of the protective surfacing material level to the bottom of the top rail. Fully tighten all bolts in accordance with tightening torque installation instructions. Block and brace for concrete.

**Step 7:** Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Plumb and level the component. Block and brace for concrete. Allow concrete to harden for 72 hours before proceeding with **Step 8**.

### Attach swing hangers to the top rail.

**Step 8:** Attach swing hangers to the top rail. See **Detail C**. Close the swing hangers around the top rail and attach as shown. Ensure hangers are properly spaced and positioned on top rail (See **Elevation View**). There is a ridge on the underside of the bottom band to keep the T nut from rotating. **When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp**. **Note:** Please read **CAUTION** before fully tightening the connections.

**Important Note:** Swing hangers should be positioned a minimum of 20" (508 mm) apart. Additionally, the horizontal distance between the vertical support and the swing shall be no less than 30 in. (760 mm) when measured at 60 in. (1524 mm) from the level of protective surfacing. Please refer to the USCPSC Handbook for Public Playground Safety for proper placement.

**Step 9:** Attach each clevis to a swing hanger. See **Detail D**. Position each clevis over the bottom hanger bushing and align holes. Insert a hex head bolt through the clevis eye, through the hanger bushing, through the other clevis eye and secure with a thin series lock nut.

**Important Note:** Tighten the thin series lock nut on shoulder bolt until the clevis binds on the swing hanger casting. Then loosen the thin series lock nut approximately 1/4 turn until the swing clevis moves freely. Insure the bolt threads are fully engaged into the nut's locking device.

**Note:** Swing clevises will need to be removed from swing hangers to install selected swing seat.

### Final Details

**Step 10:** See Swing Seat Installation Instruction sheet for swing seat attachment. Swing seats are ordered separately.

**Step 11:** Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

### **Torque Specifications:**

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



**Step 12:** Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

**Note:** This step should be executed after structure has been assembled and properly footed.

**Step 13:** For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the equipment at eye level.



### XX0287 - 5 in. O.D. 2-UNIT ALUMINUM ARCH SWING 8 ft. (2438 mm) TOP RAIL

PART NO.	DESCRIPTION	QTY.
AAU0155	HANGER - 5" SWING	4
ABC0704	CONNECTOR - SWING CLEVIS	4
APT0144	POST - 5" O.D. x 133-1/2" ALUMINUM ARCH SUPPORT	2
APT0432	BEAM - 5" x 126" ARCH SWING TOP RAIL	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0412	BOLT - 3/8"-16 x 2 1/2" HEX HEAD SHOULDER	4
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	2
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE06686	BOLT - 3/8"-16 x 5.50" BUTTON HEAD - SS	2
BAE0670	T-NUT - 3/8"-16 x 7/16" - SS	4
BAE0905	WRENCH - 3/16" SHORT HEX KEY	1
BAE0915	BIT - 3/8" TAMPER RESISTANT	1
BAE0922	TOOL - TT 45 L WRENCH	1
ALB0025	LABEL - AGE APPROPRIATE	1

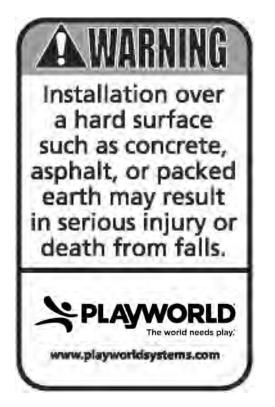




#### FINAL INSPECTION

- Playworld Systems<sup>®</sup> insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard for your area, appropriate for the fall height of each structure.
- Playworld Systems<sup>®</sup> strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently. Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
- Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
- Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
- Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
- · Clean dried concrete off of components and any other affected surface.
- Touch-up any scratches or installation damage to powder coated finish with colormatched spray paint.
- Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.
- Insure that protective surfacing is properly installed according to recommendations. Footings must not be exposed. Refer to the florescent orange sheet included in the front of the installation instruction booklet titled "Owners Manual".
- Insure that hard surface warning/Playworld Systems<sup>®</sup> identification labels (shown below) are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For areas complying with ASTM F-1487 or CSA Z-614 an age appropriate label must be applied in a visible location.

• Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.







#### Swing Hangers

- Inspect swing hangers to insure they are properly secured to the support posts.
- Use the supplied torx-style tamper-resistant bit to insure bolt connection is tight.
- Use the supplied 3/16" hex key wrench to insure the set screw connection is tight.
- · Inspect drive rivets to insure they are intact and secure.
- Visually inspect swing hangers for cracks or breakage. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

#### Fasteners

Inspect for loose fasteners.

Tightening torque specifications are:

Bolts and Nuts: Snug tighten and tighten an additional one-half turn.

<u>Set Screws:</u> Snug tighten and tighten an additional full turn.

- Inspect drive rivets to insure they are intact and secure.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

#### Welds

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

#### Finish

· Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with colormatching paint and allow to dry. Recoat area with colormatching paint if required. Drying time is approximately 8 hours between coats.

#### Footings

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

#### Surfacing

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

#### **Replacement Parts**

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

### **Equipment Maintenance**

Playworld Systems<sup>®</sup> Model XX0287 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing 8 ft. (2438 mm) Top Rail



### Warning! Exceeding 25 ft lbs (33.9 Nm) of torque on the swing hanger bolts may cause damage to the swing band.





### **Inspection Form**

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

# **Preventive Maintenance** ... for Safety's Sake!

SGS

ECN2147

INSPECTION CHECKLIST		Frequency	Inspe Code	ection Date	Date Repairs Completed	
Inspect surfacing to insure proper depth and distribution.		High				Inspection Codes
Inspect swing hangers for tightness and damage.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect for loose, missing, worn, or broken fasteners.		High				
Inspect footing to insure support is secure and footing is not damaged	d.	Low				
Inspector: Name (Please Print)	Signature:				Da	te://

### MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date
			_

Repairer: Name (Please Print)	Signature:	Date:/ / 🦳
Page 14 of 14		Model XX0287

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

#### **Installation Guidelines**

• Identify all parts and thoroughly read the assembly instructions before beginning construction.

• Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and noencroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

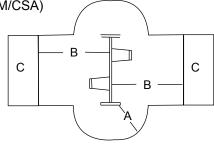
#### (ASTM / CSA)

• For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. The use zone on the sides of the swing should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

• For enclosed infant swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the measurement from the pivot point to the swing seat surface measured from a point directly beneath the pivot on the supporting structure. The use zone on the ends of the swing (support structure) should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

#### Belt/Rigid Seat Swing Zones (ASTM/CSA)

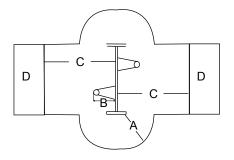
- **A** = Side Use Zone 72 in. (1829 mm)
- B = End Use Zone Height of Pivot Point from Surfacing x 2 Both Sides of Top Rail
- C = No-encroachment Zone 72 in. (1829 mm)



• The use zone on either end of the swing (72 inches [1829 mm]) may be overlapped by the use zone on either end of the another swing (72 inches [1829 mm]). Swing zones on either side of the top rail may **not** be overlapped by the use zones of other play equipment.

### Infant Seat Swing Zones

- **A** = Side Use Zone 72 in. (1829 mm)
- **B** = Distance from Pivot Point to Swing Seat Surface
- C = End Use Zone: B x 2 Both Sides of Top Rail
- D = No-encroachment Zone 72 in. (1829 mm)





### (EN)

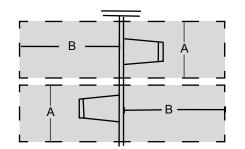
• For areas conforming to the EN-1176 Standard, the impact area shall be determined by calculating the horizontal distance where the swing seat is at an 60° arc and adding the appropriate amount of distance based upon the type of protective surfacing. This distance shall be covered by protective surfacing on both sides of the top rail. The protective surfacing shall be appropriate for the maximum fall height of the swing. There is no difference in the calculation based on the type of swing seat.

The impact area on both sides of top rail =  $(0.867 \times \text{Distance from pivot point}) + \underline{either}$  1750 mm if unitary surfacing <u>or</u> 2250 mm if loose-fill surfacing is used. There shall be a minimum corridor of 1750 mm centered on each swing seat for the length of the impact area.

### **Use Zones - EN Compliance**

- A = Width of the corridor centered on the swing seat 1750 mm
- **B** = Length of the use zone on both sides of the top rail (8ft) Tot Seats: 3290 mm for unitary surfaced areas

or 3790 mm for areas covered with loose fill surfacing. Belt / Rigid Seats: 3510 mm for unitary surfaced areas or 4010 mm for areas covered with loose fill surfacing



• Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.

• Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.

• After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.

• Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.

• Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.

• Insure that hard surface warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.

• **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.



• The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, <u>A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment</u>. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

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

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

### **Supervision Guidelines**

• Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.

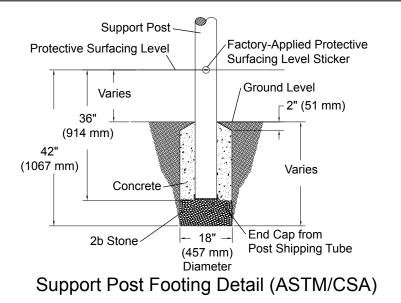
• Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.

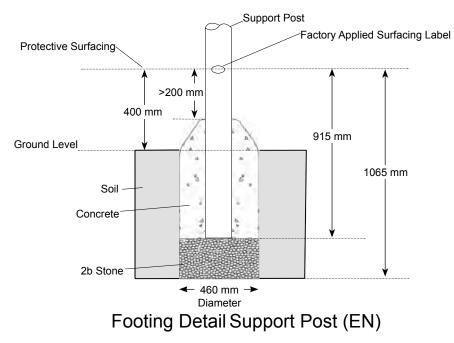
• It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.

• Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.

• Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.

• Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.





### FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete. *Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
   For example:
  - If local soil is loose or unstable, a larger footing may be required.

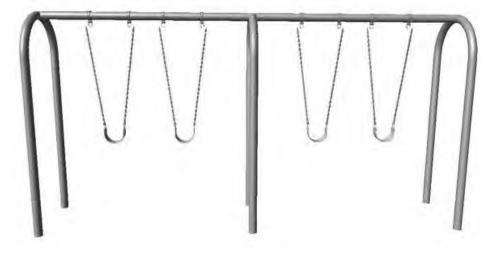
- If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.

- · Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.





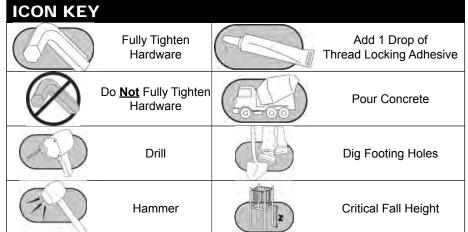
Playworld Systems<sup>®</sup> Model XX0370 5 in. (127 mm) O.D. Aluminum Arch Swing 2-Unit Add-A-Bay



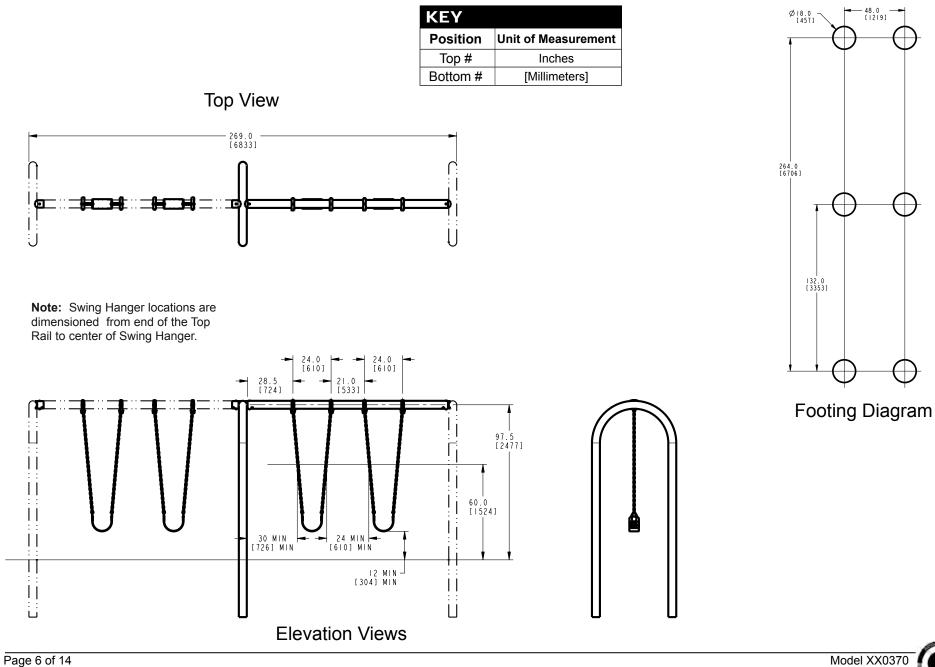
Assembly View

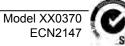
### **Installation Preparation**

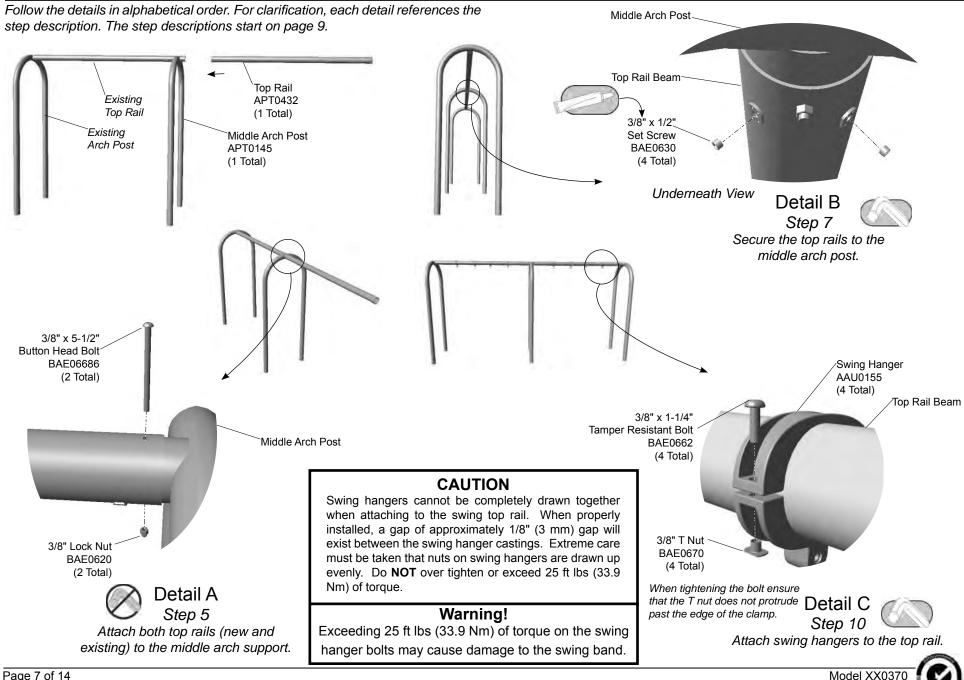
Recommended Crew:	Three (3) adults
Installation Time:	2 man-hours
Concrete Required:	0.24 cubic yard (0,18 cubic meters)
Use Zone:	Refer to Master Drawing
User Group Age (years):	ASTM/CSA: 2-12, EN: 2-14



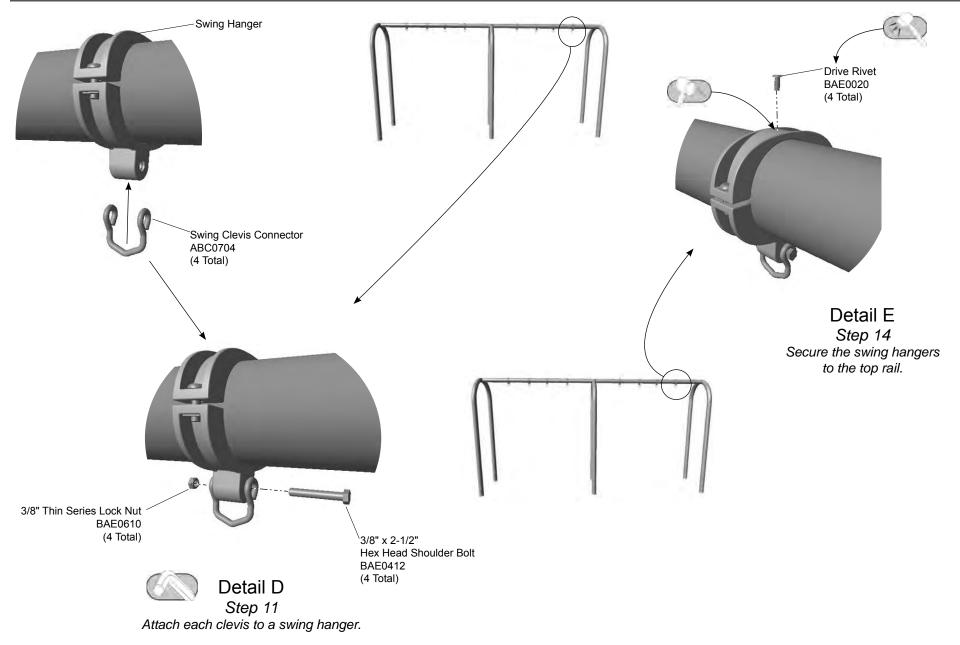


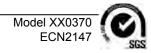






ECN2147





**Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

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

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

Step 2: Separate and identify all components and hardware.

Step 3: Prepare footings as shown in the Support Post Details on Page 4.

### **Existing Swing**

**Step 4:** Applies to adding an additional bay to a pre-existing product, remove (1) one of the existing arch supports by unscrewing and removing the connection to the top rail. Dig around the footing of the support post and transplant it to the opposing end of the bay addition as shown in the **Footing Diagram**. After completing, proceed to **Step 5**.

### **New Installation**

### Assemble the swing frame.

**Step 5:** Attach both top rails (new and existing) to the middle arch support. See **Detail A**. Select the top rail, the middle arch support, and the appropriate hardware. There are (2) two connections. Place the middle arch support in the excavated footings and brace. Place the top rail onto the arch stub and align holes. Attach as shown.

### Re-Connect opposite end of frame.

**Step 6:** Re-attach arch support to opposite end of frame using existing hardware. Refer to the documentation that came with your original swing frame.

**Step 7:** Secure the top rails to the arch posts. See **Detail B**. Apply a drop of loctite to the set screw threads and thread each screw into a hole on the underside of the post stub. Fully tighten connections according to tightening torque specifications.

### **Torque Specifications:**

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

### Position the swing frame.

**Step 8:** Place the swing frame into the footings. Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) as measured from top of the protective surfacing material level to the bottom of the top rail. Fully tighten all bolts in accordance with tightening torque installation instructions. Block and brace for concrete.

**Step 9:** Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Plumb and level the component. Block and brace for concrete. Allow concrete to harden for 72 hours before proceeding with **Step 10**.

### Attach swing hangers to the top rail.

**Step 10:** Attach swing hangers to the top rail. See **Detail C**. Close the clamps around the top rail and attach as shown. Ensure hangers are properly spaced and positioned on top rail (See **Elevation View**). There is a ridge on the underside of the bottom band to keep the T nut from rotating. **When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp**. **Note:** Please read **CAUTION** before fully tightening the connections.

**Important Note:** Swing hangers should be positioned a minimum of 20" (508 mm) apart. Additionally, the horizontal distance between the vertical support and the swing shall be no less than 30 in. (760 mm) when measured at 60 in. (1524 mm) from the level of protective surfacing. Please refer to the USCPSC Handbook for Public Playground Safety for proper placement.

**Step 11:** Attach each clevis to a swing hanger. See **Detail D**. Position each clevis over the bottom hanger bushing and align holes. Insert a hex head bolt through the clevis eye, through the hanger bushing, through the other clevis eye and secure with a thin series lock nut.

**Important Note:** Tighten the thin series lock nut on shoulder bolt until the clevis binds on the swing hanger casting. Then loosen the thin series lock nut approximately 1/4 turn until the swing clevis moves freely. Insure the bolt threads are fully engaged into the nut's locking device.

**Note:** Swing clevises will need to be removed from swing hangers to install selected swing seat.



### **Final Details**

**Step 12:** See Swing Seat Installation Instruction sheet for swing seat attachment. Swing seats are ordered separately.

**Step 13:** Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

### **Torque Specifications:**

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

**Step 14:** Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

**Note:** This step should be executed after structure has been assembled and properly footed.

**Step 15:** For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the equipment at eye level.

#### XX0370 - 5 in. O.D.(127 mm) 2-UNIT ALUMINUM ARCH SWING ADD-A-BAY

PART NO.	DESCRIPTION	QTY.
AAU0155	HANGER - 5" SWING	4
ABC0704	CONNECTOR - SWING CLEVIS	4
APT0145	POST - 5" O.D. x 133-1/2" DUAL ALUM ARCH SUPPORT	1
APT0432	BEAM - 5" x 126" ARCH SWING TOP RAIL	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0412	BOLT - 3/8"-16 x 2 1/2" HEX HEAD SHOULDER	4
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	2
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE06686	BOLT - 3/8"-16 x 5.50" BUTTON HEAD - S.S.	2
BAE0670	T-NUT - 3/8"-16 x 7/16" - S.S.	4
BAE0905	WRENCH - 3/16" SHORT HEX KEY	1
BAE0915	BIT - 3/8" TAMPER RESISTANT	1
BAE0922	TOOL - TT 45 L WRENCH	1
ALB0025	LABEL - ASTM AGE APPROPRIATE	1



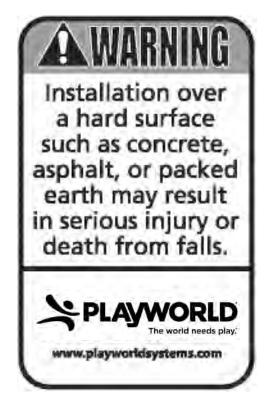
#### **FINAL INSPECTION**

- Playworld Systems<sup>®</sup> insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard for your area, appropriate for the fall height of each structure.
- Playworld Systems<sup>®</sup> strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently. Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
- Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
- Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
- Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
- Clean dried concrete off of components and any other affected surface.
- Touch-up any scratches or installation damage to powder coated finish with colormatched spray paint.
- Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.

• Insure that protective surfacing is properly installed according to recommendations. Footings must not be exposed. Refer to the florescent orange sheet included in the front of the installation instruction booklet titled "Owners Manual".

• Insure that hard surface warning/Playworld Systems<sup>®</sup> identification labels (shown below) are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For areas complying with ASTM F-1487 or CSA Z-614 an age appropriate label must be applied in a visible location.

• Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.





Model XX03

Page 11 of 14

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#### **Swing Hangers**

- Inspect swing hangers to insure they are properly secured to the support posts.
- Use the supplied torx-style tamper-resistant bit to insure bolt connection is tight.
- Use the supplied 3/16" hex key wrench to insure the set screw connection is tight.
- · Inspect drive rivets to insure they are intact and secure.
- Visually inspect swing hangers for cracks or breakage. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

#### Fasteners

Inspect for loose fasteners.

Tightening torque specifications are:

Bolts and Nuts: Snug tighten and tighten an additional one-half turn.

<u>Set Screws:</u> Snug tighten and tighten an additional full turn.

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

#### Welds

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

#### Finish

· Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with colormatching paint and allow to dry. Recoat area with colormatching paint if required. Drying time is approximately 8 hours between coats.

#### Footings

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

#### Surfacing

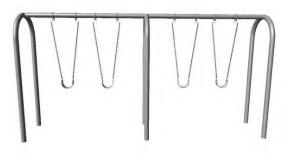
• Refer to the specific surfacing maintenance detail sheet for additional information.

#### **Replacement Parts**

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

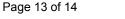
### **Equipment Maintenance**

Playworld Systems<sup>®</sup> Model XX0370 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing Add-A-Bay



### Warning! Exceeding 25 ft lbs (33.9 Nm) of torque on the swing hanger bolts may cause damage to the swing band.





### **Inspection Form**

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

# Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ction Date	Date Repairs Completed	
Inspect surfacing to insure proper depth and distribution.		High				Inspection Codes
Inspect swing hangers for tightness and damage.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect for loose, missing, worn, or broken fasteners.		High				
Inspect footing to insure support is secure and footing is not damaged	d.	Low				
Inspector: Name (Please Print)	Signature:				Da	ite://

### MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print)	 Signature:	Date://	
Dego 14 of 14		Madal VV0270	





The world needs play."



Assembly View

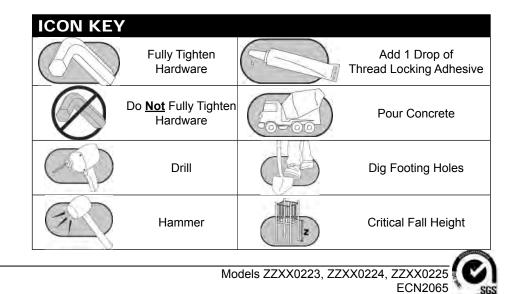
Model Number	Top Rail Height
ZZXX0223	7 ft. (2135 mm)
ZZXX0224	8 ft. (2440 mm)
ZZXX0225	10 ft. (3050 mm)

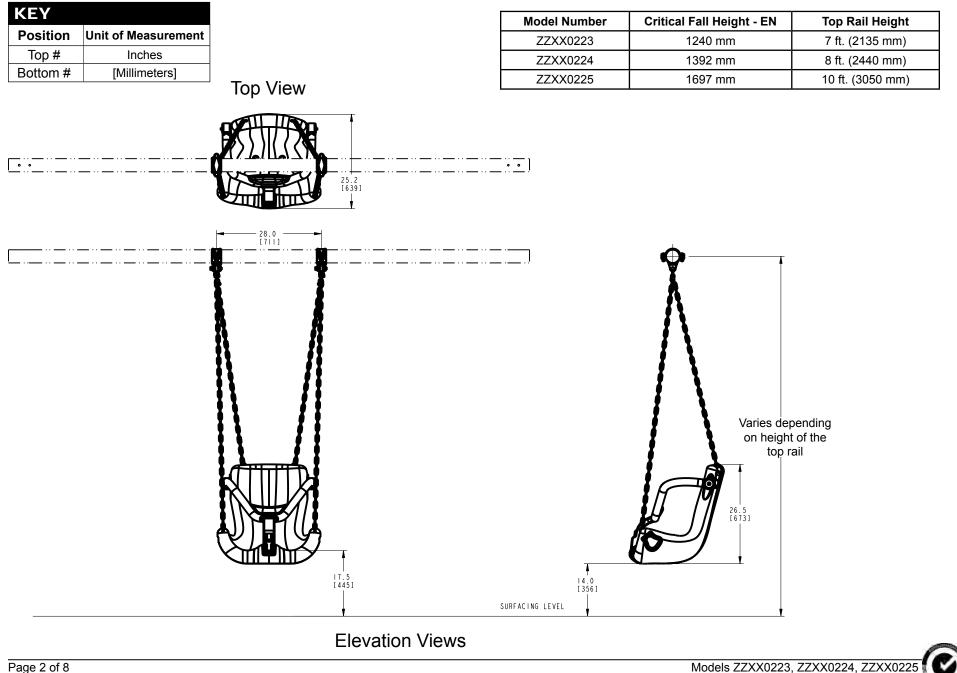
### **Installation Instructions**

Playworld Systems<sup>®</sup> Models XX0223, XX0224, XX0225 Accessible Swing Seat w/ Galvanized Chain to 7 ft (2134 mm), 8 ft. (2438 mm), and 10 ft. (3048) Top Rail

### **Installation Preparation**

Recommended Crew:	One (1) adult
Installation Time:	0.5 man hour
Use Zone:	Refer to swing set instructions
User Group Age (years	s): ASTM/CSA: 2-12, EN: 2-14

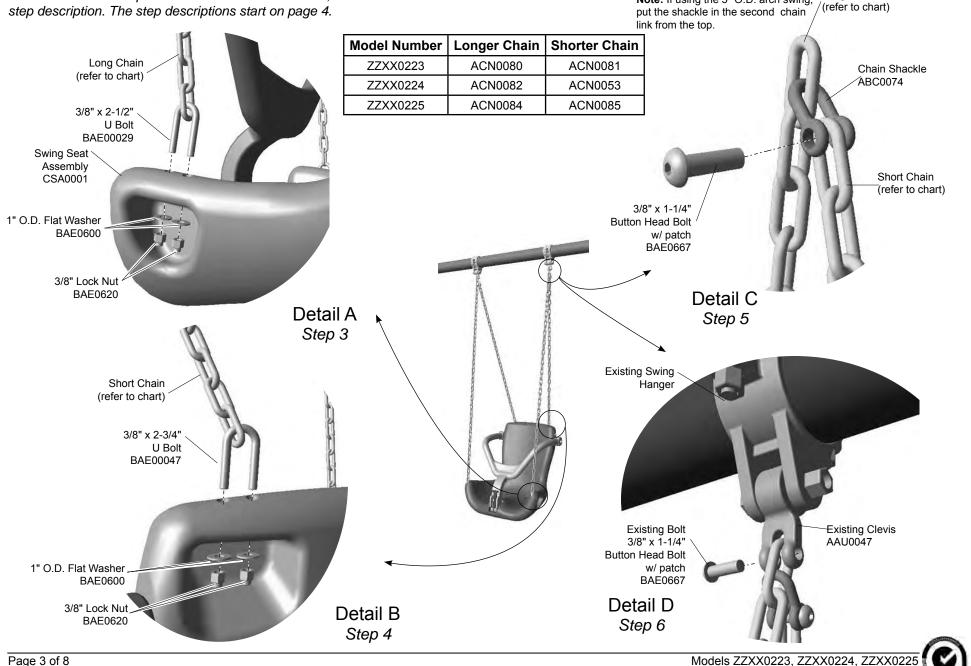




ECN2065

SGS

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.



Long Chain

ECN2065

SGS

Note: If using the 5" O.D. arch swing,

\_\_Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

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

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

\_Step 2: Separate and identify all components and hardware.

### Attach the longer chain assembly to the accessible swing seat.

**\_\_\_Step 3:** See **Detail A**. Select the accessible swing seat, the longer chain, and the appropriate hardware. There is (1) one connection per chain, (2) two total connections. Insert a U-bolt through the chain and into the openings on the top of each arm rest. Attach as shown.

#### Attach the shorter chain assembly to the accessible swing seat.

**\_\_\_Step 4**: See **Detail B**. Select the shorter chain, and the appropriate hardware. There is (1) one connection per chain, (2) two total connections. Insert a U-bolt through the chain and into the openings on the top of the seat back. Attach as shown.

### Connect the chains.

**\_\_\_\_\_Step 5:** See **Detail C**. Select the swing seat assembly, (2) two shackles, and the appropriate hardware. There are (2) two connections. Thread a shackle through the last link of one of the longer "front" chains. Insert the last link of the shorter chain into the open end of the shackle. Insert a bolt though the unthreaded side of the shackle, *through the last link* of the shorter chain, and thread into the opposite side of the shackle. Repeat for the other set of chains.

#### Attach the seat assembly to the swing hangers.

**\_\_\_\_\_Step 6:** See **Detail D**. There are (2) two connections. Remove the 1-1/4" bolt from the swing hanger clevis with the included hex wrench. Select the swing seat and place the last link of the longer chain into the open end of the clevis. Reinsert the bolt through the unthreaded side of the clevis, *through* the chain link, and thread into the opposite side of the clevis.

### Final Details.

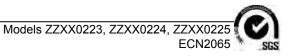
**\_\_\_Step 7:** Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

#### **Torque Specifications:**

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

**Important Note:** The vertical distance between an occupied seat and the protective surface should be at least 14" (356 mm). Remove any excess chain.

**Usage instructions:** Place child in swing and pull the harness down around child. Pull the rubber latch up until the hole aligns with the protrusion on the harness. Press the rubber latch onto the harness to secure. To release the latch, pull the rubber up and out until the harness is released. Do **NOT** attempt to pull harness out of swing seat without disengaging the latch first.



### ZZXX0223 - ACCESSIBLE SWING SEAT w/ GALVANIZED CHAIN TO A 7 ft. (2134 mm) TOP RAIL

### ZZXX0225 - ACCESSIBLE SWING SEAT w/ GALVANIZED CHAIN TO A 10 ft. (3048 mm) TOP RAIL

PART NO.	DESCRIPTION	QTY.	PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2	ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0080	CHAIN - 57.00" 4/0 GALVANIZED	2	ACN0084	CHAIN - 93.00" 4/0 GALVANIZED	2
ACN0081	CHAIN - 40.00" 4/0 GALVANIZED	2	ACN0085	CHAIN - 75.00" 4/0 GALVANIZED	2
BAE0029	BOLT - 3/8"-16 x 7/8" x 2-1/2" U	2	BAE0029	BOLT - 3/8"-16 x 7/8" x 2-1/2" U	2
BAE0047	BOLT - 3/8"-16 x 7/8" x 2-3/4" U	2	BAE0047	BOLT - 3/8"-16 x 7/8" x 2-3/4" U	2
BAE0600	WASHER - 1" O.D. FLAT	8	BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	8	BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	8
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2	BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
CSA0001	ASSY - ACCESSIBLE SWING SEAT	1	CSA0001	ASSY - ACCESSIBLE SWING SEAT	1

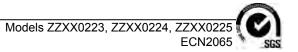
## ZZXX0224 - ACCESSIBLE SWING SEAT w/ GALVANIZED CHAIN TO A 8 ft. (2438 mm) TOP RAIL

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0053	CHAIN - 52" 4/0 GALVANIZED	2
ACN0082	CHAIN - 69.00" 4/0 GALVANIZED	2
BAE0029	BOLT - 3/8"-16 x 7/8" x 2-1/2" U	2
BAE0047	BOLT - 3/8"-16 x 7/8" x 2-3/4" U	2
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	8
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
CSA0001	ASSY - ACCESSIBLE SWING SEAT	1





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#### Fasteners

Inspect for loose fasteners.

Tightening torque specifications are:

Bolts and Nuts: Snug tighten and tighten an additional one-half turn.

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

#### **Plastic Parts**

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

#### Castings

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

#### Finish

· Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with colormatching paint and allow to dry. Recoat area with colormatching paint if required. Drying time is approximately 8 hours between coats.

To repair the coating, contact the Playworld Systems' Customer Service Department for a coating repair touchup kit.

#### **Replacement Parts**

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

# **Equipment Maintenance**

Playworld Systems<sup>®</sup> Model XX0223, XX0224, XX0225 Accessable Swing Seat w/ Galvanized Chain to 7 ft (2134 mm), 8 ft. (2438 mm), and 10 ft. (3048) Top Rail







# **Inspection Form**

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

# Preventive Maintenance

... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ection Date	Date Repairs Completed	
Inspect plastic parts for damage.		Medium				Inspection Codes
Inspect clamps for tightness and damage.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect for loose, missing, worn, or broken fasteners.		High				
Inspect footing to insure support is secure and footing is not damage	d.	Low				
Inspect surfacing to insure proper depth and distribution.		High				
Inspector: Name (Please Print)	Signature:				Da	ate://

### MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date
Repairer: Name (Please Print)	Signature:	Date:	_//





The world needs play."



## Assembly View

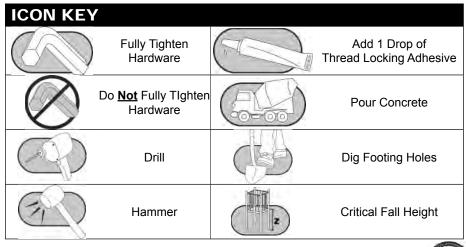
Refer to the Elevation View for the specific Critical Fall Height for the component.

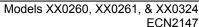
# Installation Instructions

Playworld Systems® Models XX0260, XX0261, & XX0324 Belt Seat with Swing Chain

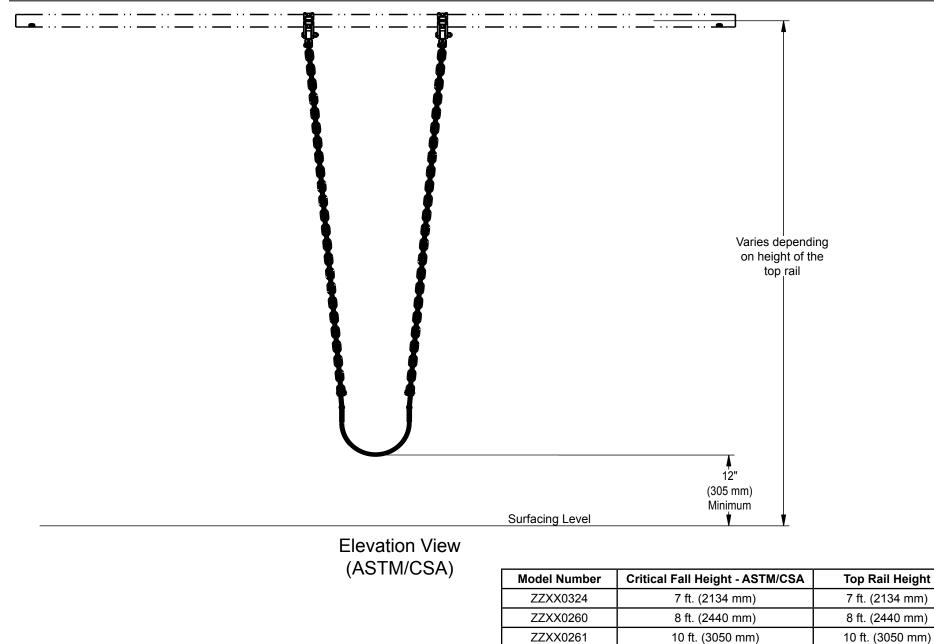
## Installation Preparation

Recommended Crew: .	One (1) adult
	0.25 hour
Use Zone:	
	): ASTM/CSA: 2-12, EN: 2-14

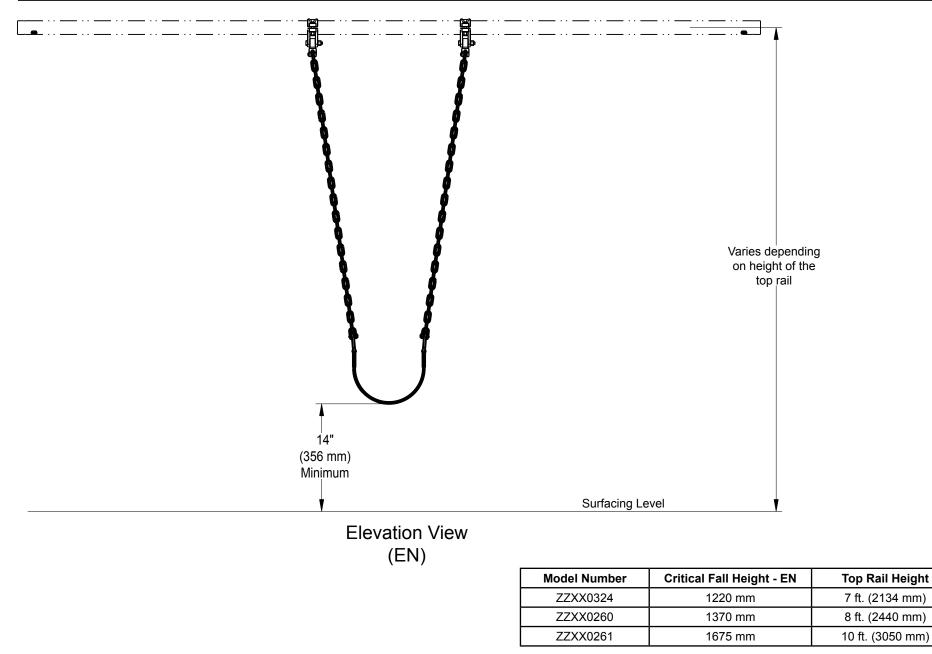


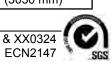




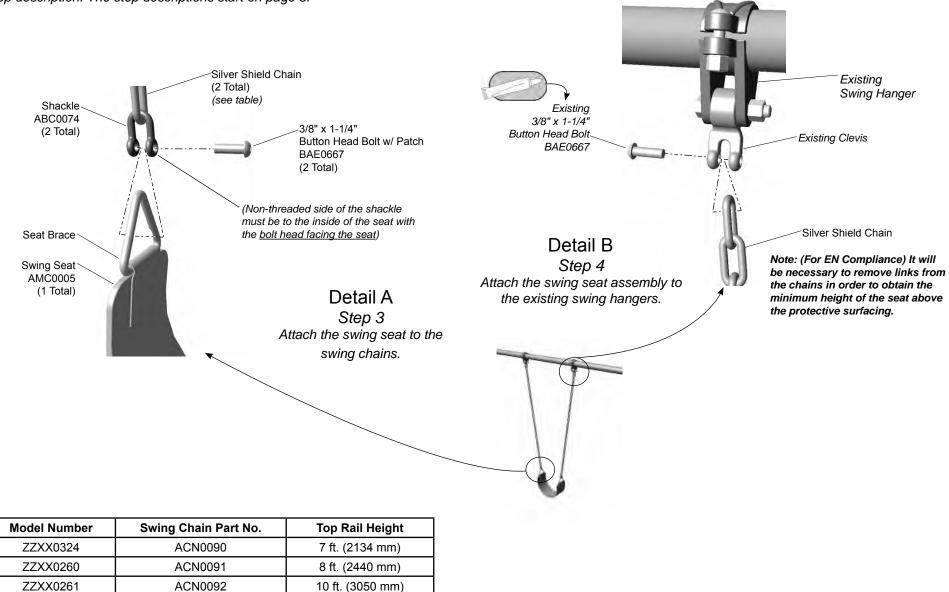


SGS





Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



**Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

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

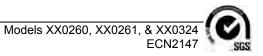
Step 2: Separate and identify all components and hardware.

**Step 3:** Attach the swing seat to the swing chains. See **Detail A**. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat.

Step 4: Attach the swing seat assembly to the existing swing hangers. See Detail B. Remove the 1-1/4" bolt from the swing hanger clevis with the included wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown. Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side. Note: (For EN Compliance) It will be necessary to remove links from the chains in order to obtain the minimum height of the seat above the protective surfacing.

### Final Details.

**Step 5:** Fully tighten all fasteners according to tightening torque specifications. **Torque specifications** - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.



### ZZXX0324 - BELT SEAT WITH SWING CHAIN

### - 7 ft. (2134 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CNCTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0090	CHAIN - 53.71" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1

## ZZXX0260 - BELT SEAT WITH SWING CHAIN

#### - 8 ft. (2438 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	) 2
ACN0091	CHAIN - 65.11" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1

## ZZXX0261 - BELT SEAT WITH SWING CHAIN

### - 10 ft. (3048 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0092	CHAIN - 89.01" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1





#### Swing Seat

• Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

#### Fasteners

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

### Finish

• Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

### Surfacing

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

### **Replacement Parts**

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

## **Equipment Maintenance**

Playworld Systems<sup>®</sup> Models XX0324, XX0260 & XX0261 Belt Seat with Swing Chain







# **Inspection Form**

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

# Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ection Date	Date Repairs Completed	
Inspect chain and swing seat for damage.		Medium				Inspection Codes
Inspect surfacing to insure proper depth and distribution.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect for loose, missing, worn, or broken fasteners.		High				
Inspector: Name (Please Print)	Signature:	1			Da	ite: / /

## MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date
			-
Repairer: Name (Please Print)	Signature:	Date:/	/





Playworld Systems<sup>®</sup> Models XX0265, XX0266, & XX0325 Infant Swing Seat with Swing Chain



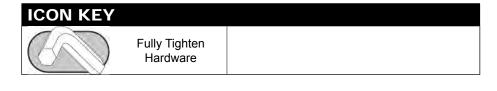
# Installation Preparation

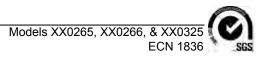
Recommended Crew:	One (1) adult
Installation Time:	0.25 hour
Use Zone:	Refer to the swing frame instructions
User Group:	Ages 2 - 5 years

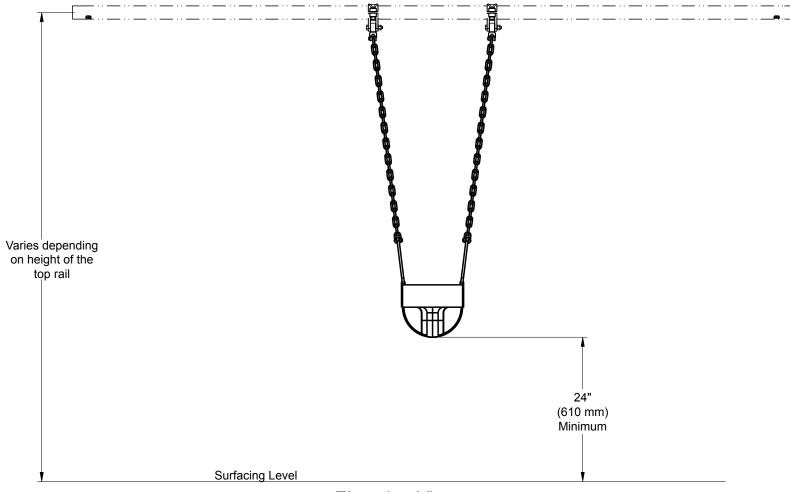
Assembly View

Refer to the Elevation View for the specific Critical Fall Height for the component.

Model Number	Top Rail Height
ZZXX0325	7 ft. (2134 mm)
ZZXX0265	8 ft. (2440 mm)
ZZXX0266	10 ft. (3050 mm)







**Elevation View** 

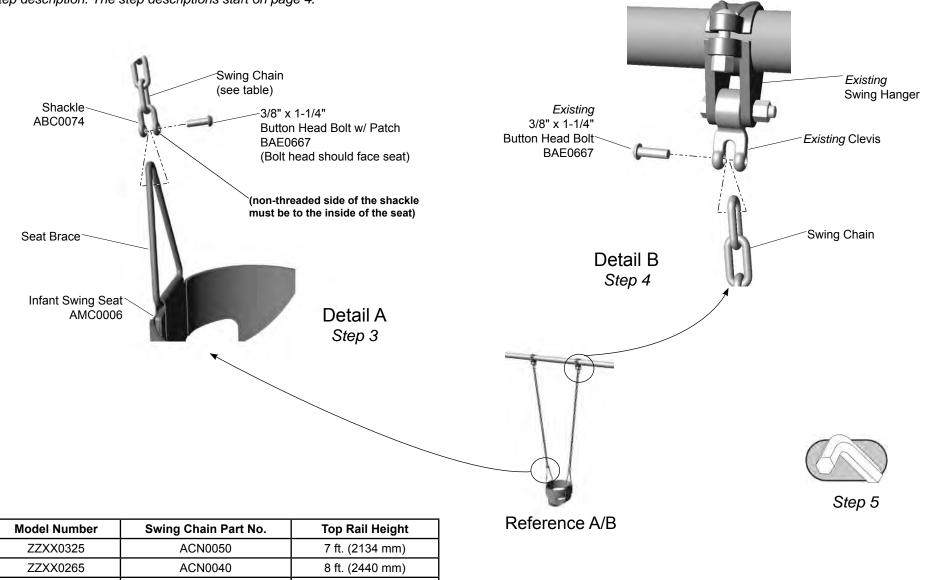
Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0325	1345 mm	7 ft. (2134 mm)
ZZXX0265	1525 mm	8 ft. (2440 mm)
ZZXX0266	1830 mm	10 ft. (3050 mm)

SGS

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.

ACN0041

10 ft. (3050 mm)



ZZXX0266

\_\_\_Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

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

\_Step 2: Separate and identify all components and hardware.

### Attach the swing seat to the swing chains.

**\_\_\_\_\_Step 3:** Attach the swing seat to the swing chains. See **Detail A**. Select the swing seat, and (2) two of the following: bolts, chains, and shackles. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat.

### Attach the swing seat assembly to the existing swing hangers.

**\_\_\_\_\_Step 4:** Attach the swing seat assembly to the existing swing hangers. See **Detail B**. Remove the 1-1/4" bolt from the swing hanger clevis with the included hex key wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown.

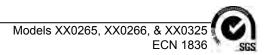
Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side.

**Important Note:** The vertical distance between an <u>occupied</u> seat and the protective surface shall be no less than 24" (610 mm). Remove any excess chain.

### Final Details.

**\_\_Step 5:** Fully tighten all fasteners according to tightening torque specifications.

**Torque specifications** - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.



## ZZXX0325 - INFANT SWING SEAT WITH SWING CHAIN

- 7 ft. (2134 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CNECTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0050	CHAIN - 36" 4/0 Swing	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1

#### ZZXX0265 - INFANT SWING SEAT WITH SWING CHAIN - 8 ft. (2438 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0040	CHAIN - 47" 4/0 Swing	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1

## ZZXX0266 - INFANT SWING SEAT WITH SWING CHAIN

- 10 ft. (3048 mm) TOP RAIL HEIGHT

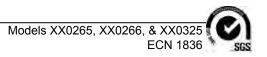
PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	) 2
ACN0041	CHAIN - 72" 4/0 Swing	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1





Models XX0265, XX0266, & XX0325

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#### Swing Seat

• Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

#### Fasteners

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

### Finish

• Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

### Surfacing

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

### **Replacement Parts**

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

Equipment Maintenance Playworld Systems<sup>®</sup>

Models XX0265, XX0266, & XX0325 Infant Swing Seat with Swing

Chain







Models XX0265, XX0266, & XX0325



## **Inspection Form**

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

# Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ection Date	Date Repairs Completed	
Inspect chain and swing seat for damage.		Medium				Inspection Codes
Inspect surfacing to insure proper depth and distribution.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect for loose, missing, worn, or broken fasteners.		High				]
						]
						1
	Signature:		•		Da	ate: / /

#### MAINTENANCE SCHEDULE

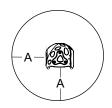
Item in Question	Description of Problem	Corrective Action	Date

 Repairer: Name (Please Print)
 Signature:
 Date:









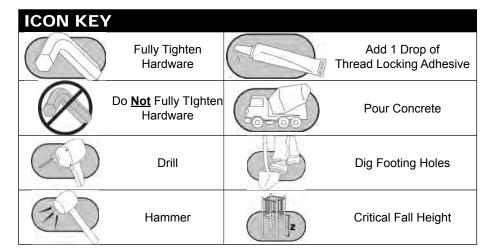
Equipment Use Zone A - (ASTM) 72 in. (1830 mm) (CSA) 1800 mm (EN) 2000 mm

# Installation Instructions

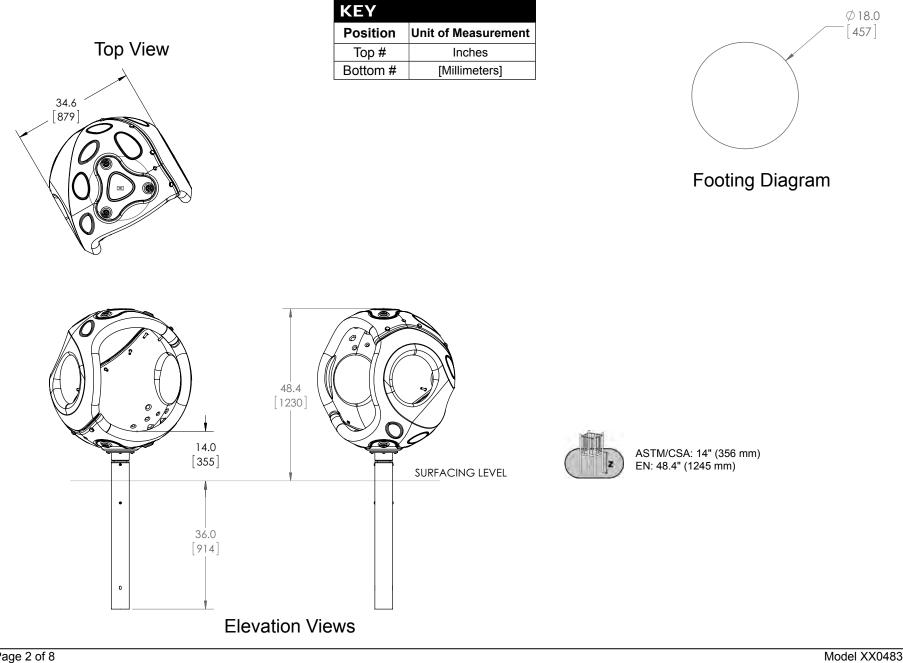
Playworld Systems<sup>®</sup> Model XX0483 Cozy Cocoon Spinning Post Mount

## **Installation Preparation**

Recommended Crew:	Two (2) adults
Installation Time:	1.5 man-hours
Concrete Required:	0.13 cubic yard (0,10 cubic meters)
Use Zone:	Refer to information below
User Group Age (years):	ASTM/CSA: 2-12, EN: 2-14



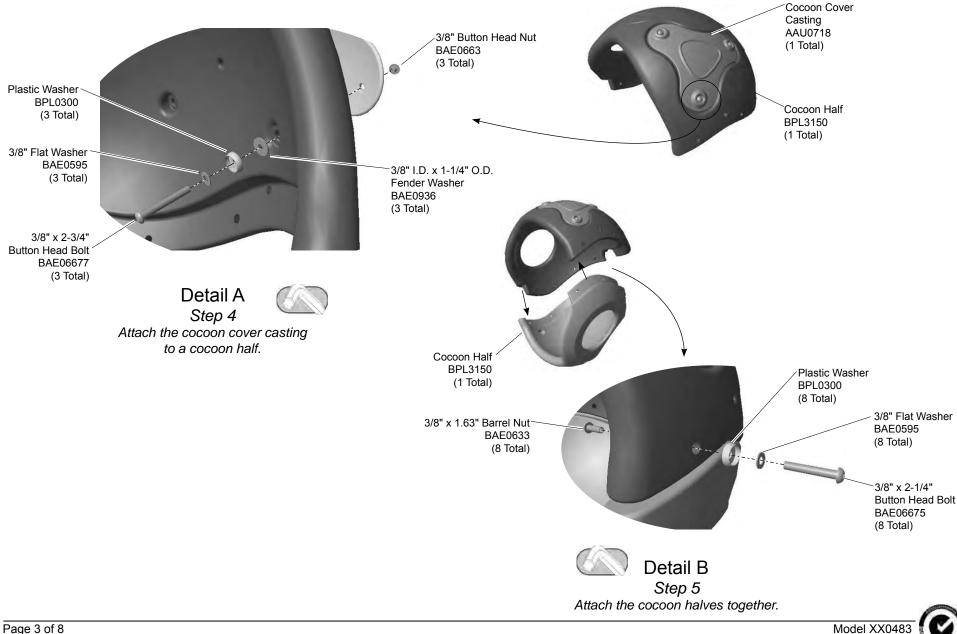


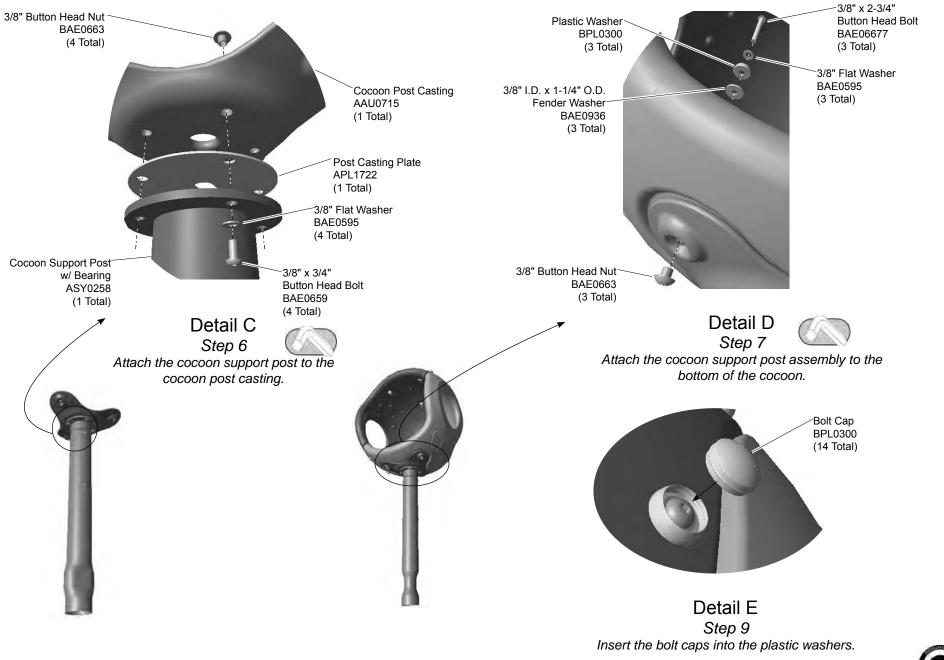


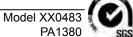
PA1380

SGS

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.







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

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

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

Step 2: Separate and identify all components and hardware.

**Step 3:** Excavate the footing as shown in the **Footing Details** in the *Annex* at the end of this document. Use the **Support Post** footing detail for the cocoon support post.

**Step 4:** Attach the cocoon cover casting to a cocoon half. See **Detail A**. Insert the casting onto a cocoon half and attach as shown. Fully tighten the connections according to tightening torque specifications.

### **Torque Specifications:**

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

**Step 5:** Attach the cocoon halves together. See **Detail B**. Place the two cocoon halves together and attach as shown. Fully tighten the connections according to tightening torque specifications.

**Step 6:** Attach the cocoon support post w/ bearing to the cocoon post casting. See **Detail C**. Position the support post and casting plate against the bottom of the cocoon post casting and attach as shown. Fully tighten the connections according to tightening torque specifications.

**Step 7:** Attach the cocoon support post assembly to the bottom of the cocoon. See **Detail D**. Place support post assembly against the bottom of the cocoon and attach as shown. Fully tighten the connections according to tightening torque specifications.

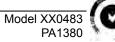
### Final Details.

**Step 8:** Plumb and level the component in it's footing. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

**Step 9:** Select plastic bolt caps and press into the plastic washers. See **Detail E**.

Hint: The bolt caps install more easily when they are warm.

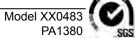
**Step 10:** For areas complying with ASTM standard F1487 or the CSAZ-614, apply the age appropriate label to the component at eye level or at a visible location.



### XX0483 - COZY COCOON SPINNING POST MOUNT

PART NO.	DESCRIPTION	QTY.
AAU0715	COCOON MOUNT (POST/BEARING)	1
AAU0718	COCOON COVER	1
APL1722	PLATE - 7.75" O.D. x 12 GA	1
ASY0258	ASSEMBLY - COCOON BEARING	1
BAE0595	WASHER - 3/8" SAE FLAT	18
BAE0633	NUT - 3/8"-16 x 1.63 BARREL	8
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - S.S.	4
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	10
BAE06675	BOLT - 3/8"-16 x 2-1/4" BUTTON HEAD - S.S.	8
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - S.S.	6
BAE0922	TOOL - TT 45 L WRENCH	2
BAE0936	WASHER - 3/8" I.D. x 1-1/4" O.D. FENDER	6
BPL0300	CAP - 3/8" BOLT	14
BPL3150	COCOON	2
ALB0025	LABEL - AGE APPROPRIATE SHEET	1
BAD0085	THREAD LOCKING ADHESIVE	1







#### Fasteners

Inspect for loose fasteners.

Tightening torque specifications are:

Bolts and Nuts: Snug tighten and tighten an additional one-half turn.

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

#### **Plastic Parts**

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

#### Castings

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

#### Welds

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

#### Finish

· Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with colormatching paint and allow to dry. Recoat area with colormatching paint if required. Drying time is approximately 8 hours between coats.

#### Footings

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

#### Surfacing

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

#### **Replacement Parts**

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

# **Equipment Maintenance**

Playworld Systems<sup>®</sup> Model XX0483 Cozy Cocoon Spinning Post Mount







# **Inspection Form**

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

# Preventive Maintenance

... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ection Date	Date Repairs Completed	
Inspect plastic parts for damage.		Medium				Inspection Codes
Inspect for loose, missing, worn, or broken fasteners.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect surfacing to insure proper depth and distribution.		High				
Inspect footing to insure support is secure and footing is not damage	ed.	Low				
						]
Inspector: Name (Please Print)	Signature:				Da	

### MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date
Repairer: Name (Please Print)	Signature:	Date:/	_/



## Guidelines



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

#### **Installation Guidelines**

• Identify all parts and thoroughly read the assembly instructions before beginning construction.

• Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and noencroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

• **ASTM compliance:** For rotating play equipment that rotates around a vertical axis, the use zone should extend on all sides a minimum distance of 72 inches (1829 mm). This use zone may **not** be overlapped by the use zones of adjacent play equipment. The exemption is equipment where the diameter of the platform is less than 20 in. (510 mm) may overlap if the adjacent designated play surfaces of each structure are less than 30 in. (760 mm) above the protective surface. If adjacent designated play surfaces on either structure exceed a height of 30 in. (760 mm), the minimum distance between structures shall be 108 in. (2740 mm).

• **CSA compliance:** For rotating play equipment, the use zone should extend on all sides a minimum distance of 1800 mm. This use zone may **not** be overlapped by the use zones of adjacent play equipment. A no-encroachment zone is also required for play equipment over 500 mm in diameter that rotates around a vertical axis. In addition to the use zone measurement, this zone will extend an additional 1800 mm and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment.

• **EN compliance:** For rotating play equipment, the use zone should extend on all sides a minimum distance of 2000 mm. This use zone may **not** be overlapped by the use zones of adjacent play equipment. There must also be a head clearance of 2000 mm above the maximum height of the rotating play equipment. Refer to the Use Zone diagram or master structure drawing.

• Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.

- Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.
- After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.

• Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.

• Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.

• Insure that Age Appropriate and Hard Surface Warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.



## **Guidelines**

• **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. **Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.** 

• The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, <u>A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment</u>. Critical fall heights for Europe and Canadian compliance shall be listed on the elevation page or master structure drawing if they differ from the ASTM standard. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

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

#### Maintenance

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

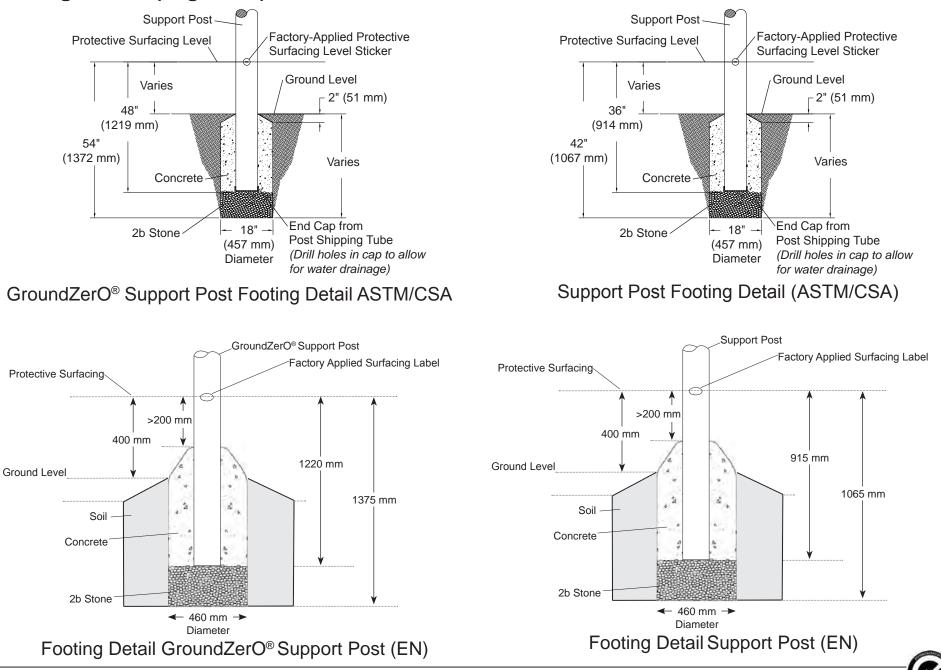
## **Supervision Guidelines**

• Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.

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



# Footing Details (in ground)



**Guidelines & Information (fs RPE)** 

Annex Page 3 of 6



# Footing Details (in ground)

### Support Post Factory-Applied Protective Surfacing Level Sticker Protective Surfacing Level Ground Level Varies -2" (51 mm) (1219 mm) 54' Varies (1372 mm) Concrete Block (457 mm) **Porous Material** Diameter GroundZerO® Support Post Footing Detail ASTM/CSA

**Block Option** 

#### Support Post Factory-Applied Protective Surfacing Level Sticker Protective Surfacing Level Ground Level Varies -2" (51 mm) 36 (914 mm) 42' (1067 mm) Varies Concrete<sup>4</sup> \_18"\_\_\_ Block (457 mm) Porous Material Diameter Support Post Footing Detail (ASTM/CSA) **Block Option**

## FOOTING NOTES (IN GROUND)

• Support post footing depth equals 42 in. (1067 mm) minus the depth of the protective surfacing material. The posts are designed to have 24" (610 mm) in concrete.

*Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).

 GroundZerO<sup>®</sup> support post footing depth equals 54 in. (1372 mm) minus the depth of the protective surfacing material. The posts are designed to have 36" (914 mm) in concrete.

*Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 42 in. (1067 mm).

- Most support posts and component support legs will have either a factory-applied sticker with a line, or factory-applied mark designating the level of protective surfacing on a clear and level installation site. The footing depth measurements are based on this line/mark.
- If the play equipment is installed on uneven terrain, maintain support post mark for the protective surfacing level at the lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase the bottom of the support post in concrete. Place the post directly on packed stone or other porous material.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.

For example:

- If local soil is loose or unstable, a larger footing may be required.

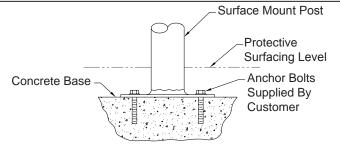
- If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.

- The base of the footing must be below the frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.



# Footing Detail (surface mount)

## **Footing Notes**



Surface Mount Footing Detail

## FOOTING NOTES (SURFACE MOUNT)

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

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

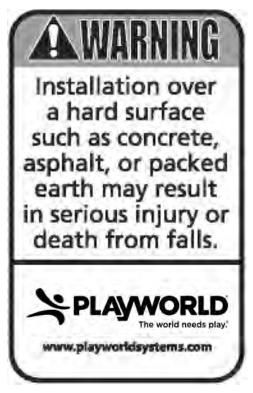


#### FINAL INSPECTION

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

• Insure that hard surface warning/Playworld Systems<sup>®</sup> identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For locations complying with ASTM F1487 or CSA Z-614, Age Appropriate labels must also be applied in a visible location.

• Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



Surfacing Warning Label





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 designation.
- 2. The letter designation for the upright posts can also be found on the packaging of each post and there is a chart for reference located in the Appendix of this manual starting on page 33.
- 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, 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.
- 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.

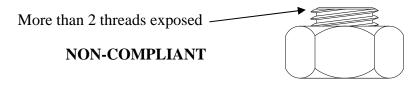


Figure 1: Thread Protrusion

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

## **GENERAL INSTALLATION GUIDELINES**

- 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.

- 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).
- 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.

## **GENERAL INSTALLATION GUIDELINES**

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17. 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).

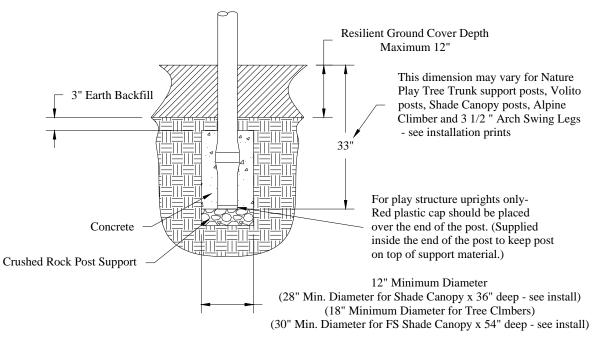


# **NO IMPACT WRENCHES**

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.

## **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** 

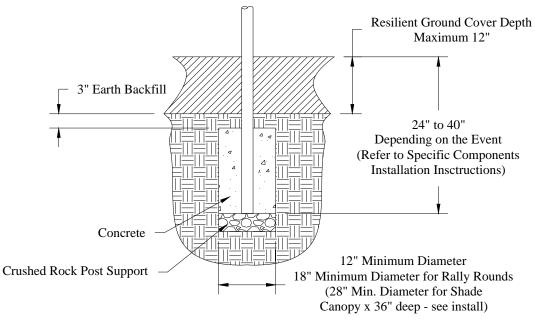
Support Post Footing Detail is used for the following:

- 5" OD TUBING
- 3 1/2" OD TUBING
- ALL SQUARE TUBING
- 12' x 12' AND 15' X 15' SHADEPLAY CANOPY POSTS (33" MIN DEPTH)
- 15' X 19', 15' X 21', HEX AND ARA SHADEPLAY CANOPY POSTS (36" MIN DEPTH)

#### **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.

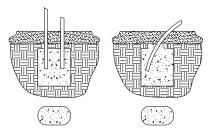
## **TYPICAL CONCRETE FOOTINGS**



**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:**

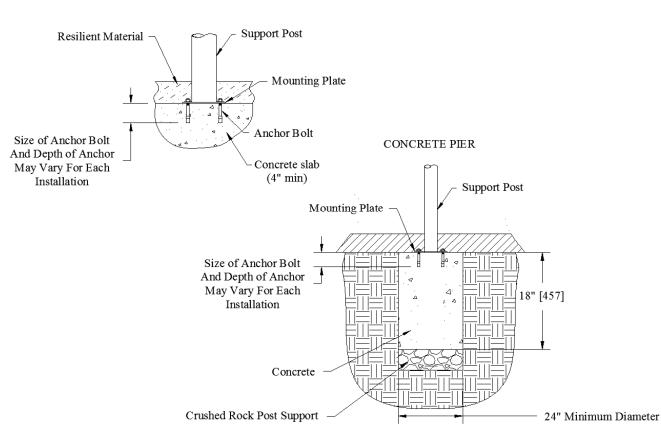
- 1. Consult your local building codes to assure proper depth of footings. The required diameter and depth of the concrete can vary depending on soil conditions and temperature extremes.
- 2. In cold weather climates the concrete should be deep enough to reach below the frost line, especially the main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

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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:**

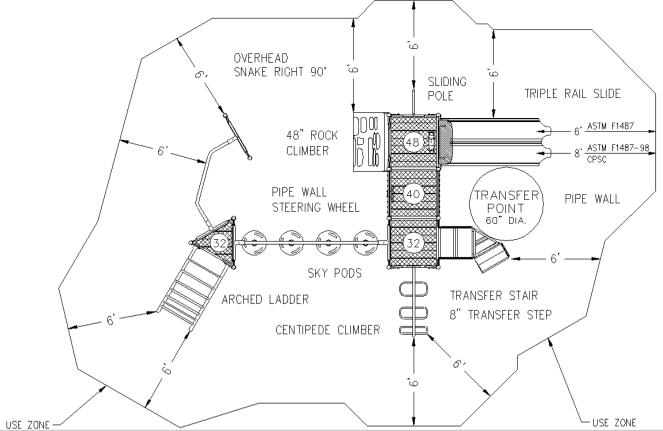
- 1. Consult your local building codes to ensure the use of the proper anchor bolt size.
- 2. Concrete must have the proper amount of curing time to ensure that anchors have maximum holding power.
- 3. Existing concrete is to be free of cracks and heaving in areas where anchor bolts are to be installed.

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## **RESILIENT SURFACING MATERIAL**

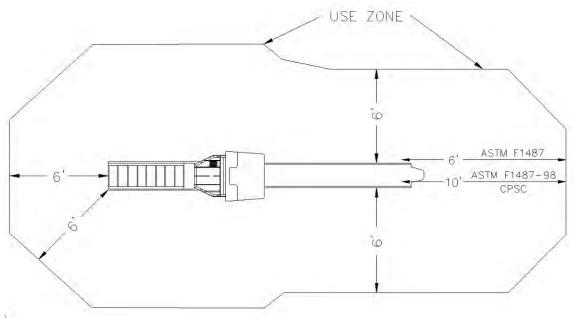
As the owner of a playground, you are responsible for understanding the recommendations for surfacing and providing and maintaining an appropriate impact attenuating surface material under and around all playground equipment.

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.)



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

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



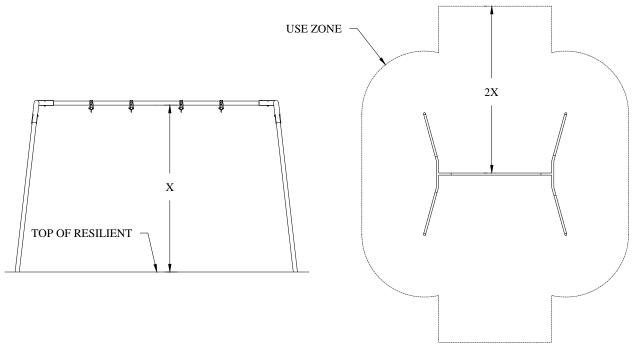
**Figure 7: Use Zone for Slides** 

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** 

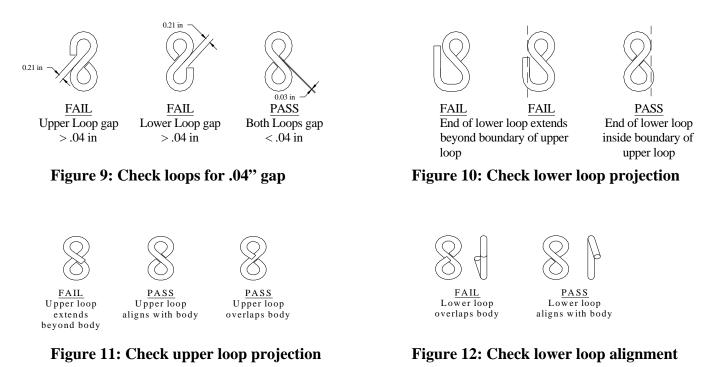
An impact attenuating surfacing material is required under and around all equipment. The Playground Surfacing Technical Information Guide published by the U. S. Consumer Product Safety Commission contains the results of tests performed to determine the relative shock-absorbing properties of seven loose-fill 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 Loose-fill material	Protects to fall height of:
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.

Table 1: CPSC Criti	cal Fall Heights (taken	from pub. 325, page 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



## WARNING AND MANUFACTURER LABELS

#### The following is the Owner's 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.



BCI Burke Company, LLC Fond du Lac, WI USA 1-800-356-2070

w heiburke.com

12345

Equipment identification label for entire play area unless otherwise labeled

10/28/2016

Structure: 99-99999-1

Burke.

AWARNING

000-356-2070 | beiburke.cs

Order:

Date:

surfac

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.

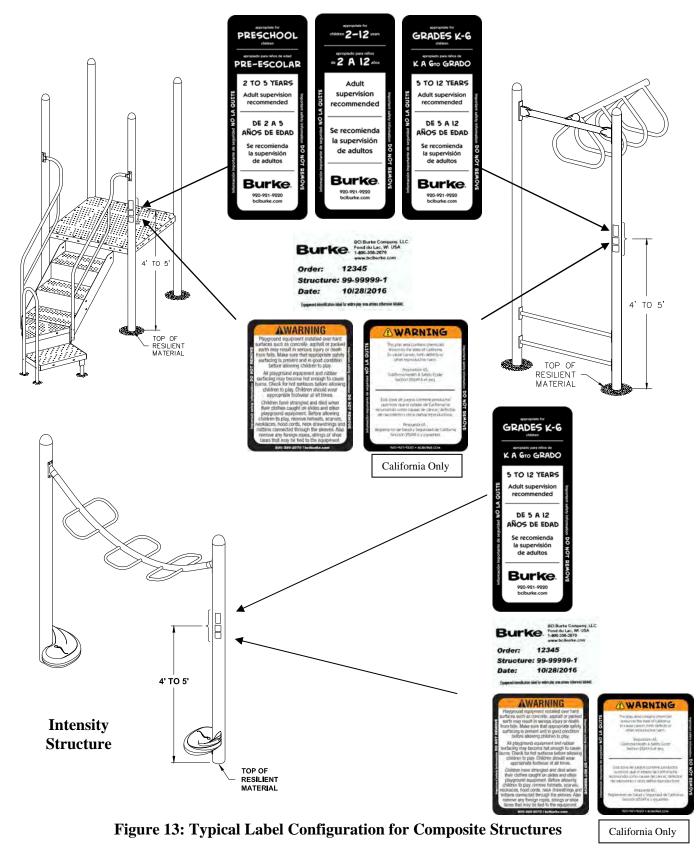
Equipment Identification Label and cover label - Place this label and clear protective cover label on all equipment, either directly below the Ageappropriate designation or as the top most label for equipment that does not have a specific age-appropriate label. See Figures 13, 14 and 15. This label provides 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



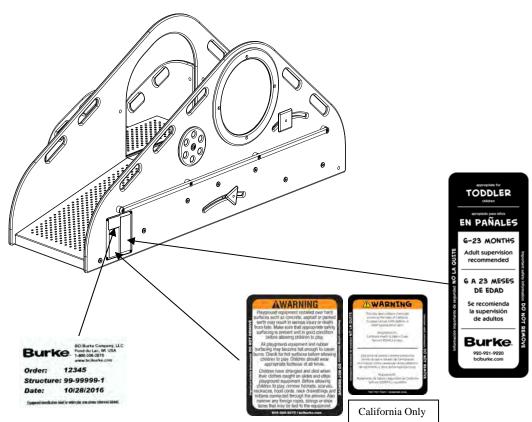


Figure 14: Typical Label Configuration for Composite Structures

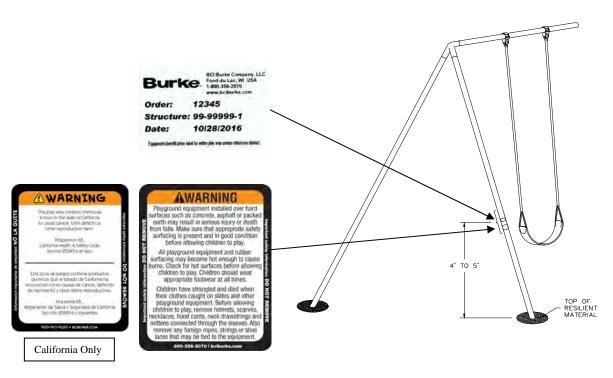


Figure 15: Typical Label Configuration for Non-Age Specific Equipment

## **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

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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.

#### **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.
- 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.

#### **Special Notes:**

- 1. Check Material Safety Data Sheet before starting to ensure safety.
- 2. Do not open container of repair material until ready to use.
- 3. As soon as you finish using the container with repair material, close it tightly immediately so it does not dry out.

## **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.

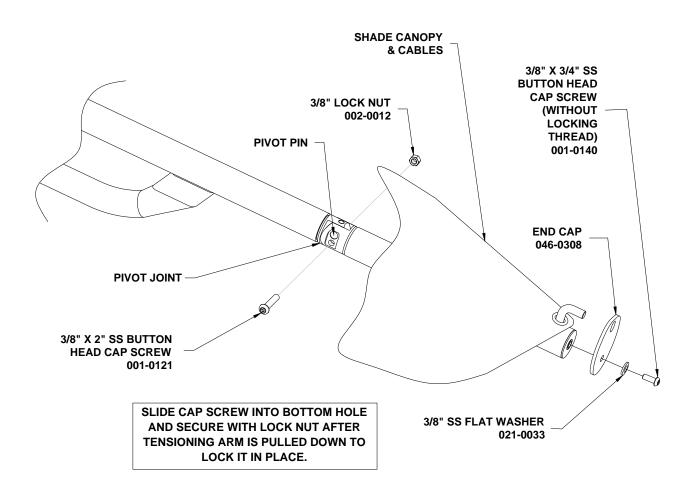
To re-install the ShadePlay canopy:

- 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.





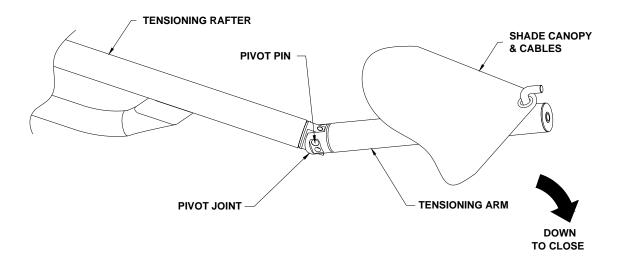
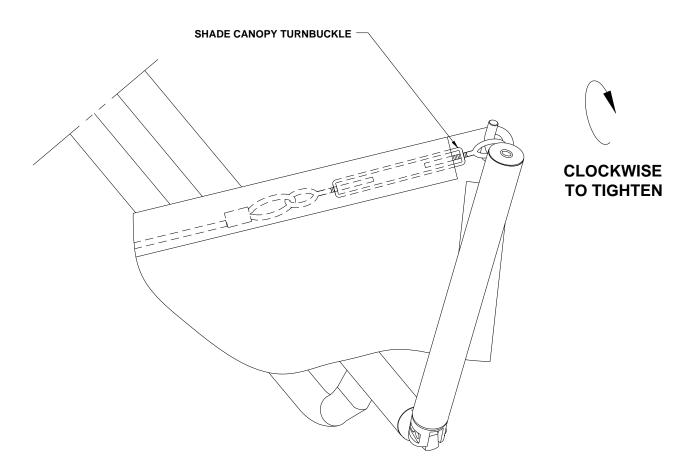
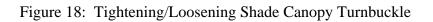


Figure 17: Tensioning Arm in 'Open Position'





## **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.</li> </ul>
	Duracell Ultra or better).
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

## **Frequency of General Maintenance**

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

## **General Maintenance Checklist**

F	<u> </u>	-	-	1	1	1	r	1	1	1		
Date												
Visible cracks, bending, warping												
Accessible sharp edges or 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												
Pinch or crush 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												

#### **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>TM</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

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.

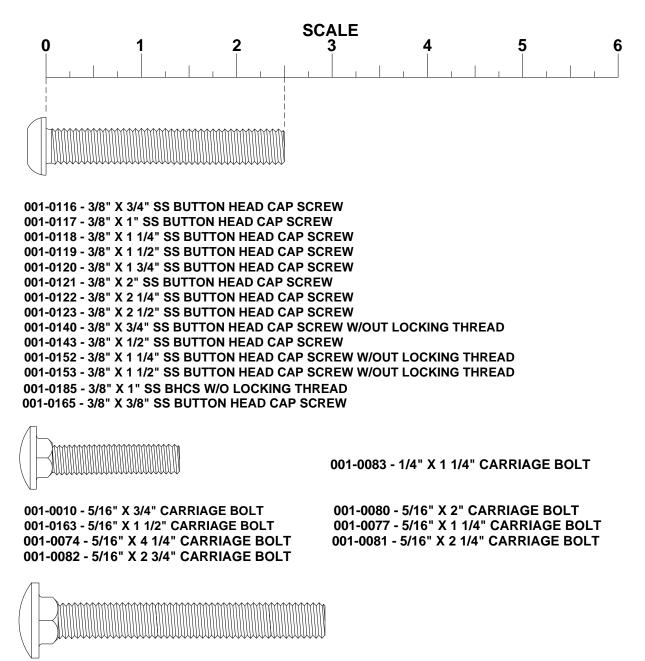
**Loss or Damage in Transit:** A signed bill of lading is our receipt from a carrier that our shipment to you was complete and in good condition upon arrival. Before you sign, please check the Bill of Lading carefully when the shipment arrives to make sure nothing is missing and there are no damages.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

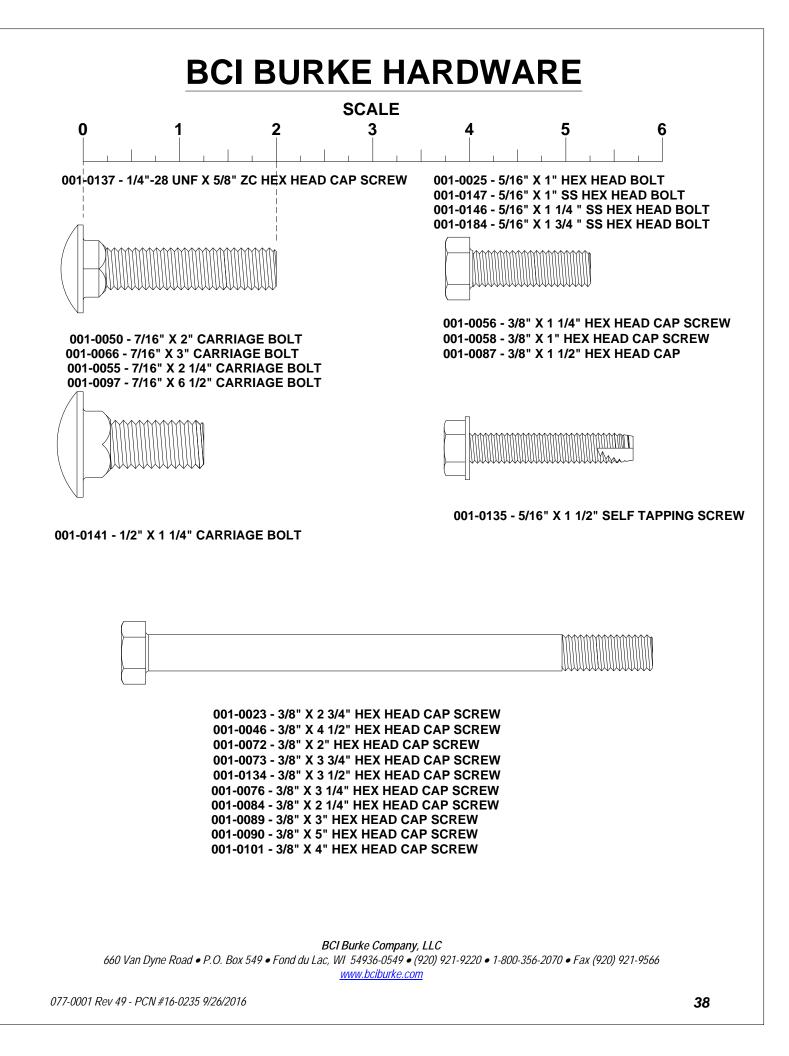
*BCI Burke Company, LLC* 660 Van Dyne Road • P.O. Box 549 • Fond du Lac, WI 54936-0549 • (920) 921-9220 • 1-800-356-2070 • Fax (920) 921-9566 <u>www.bciburke.com</u>

# **BCI BURKE HARDWARE**

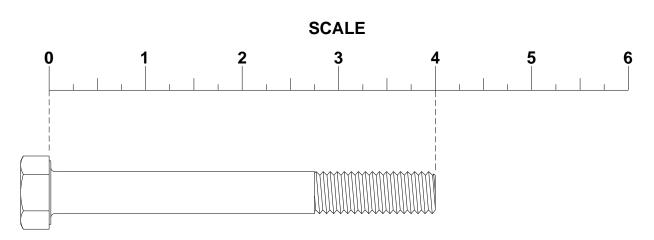


001-0018 - 3/8" X 3/4" CARRIAGE BOLT 001-0048 - 3/8" X 2 3/4" CARRIAGE BOLT 001-0098 - 3/8" X 3" CARRIAGE BOLT 001-0053 - 3/8" X 2 1/4" CARRIAGE BOLT 001-0039 - 3/8" X 2 1/2" CARRIAGE BOLT 001-0054 - 3/8" X 2 1/2" CARRIAGE BOLT 001-0068 - 3/8" X 1 1/4" CARRIAGE BOLT

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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



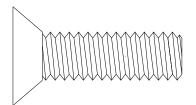
001-0037 - 7/16" X 3" HEX HEAD CAP SCREW - SLOTTED 001-0047 - 7/16" X 4 1/2" HEX HEAD CAP SCREW - SLOTTED

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

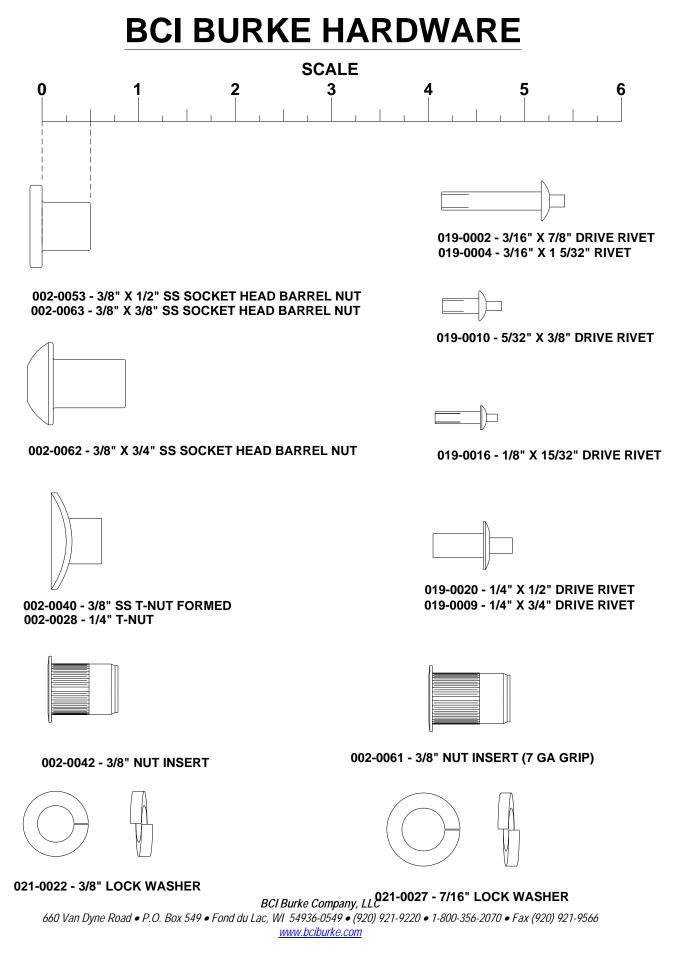
002-0012 - 3/8" LOCK NUT 002-0018 - 3/8" NUT 002-0036 - 3/8" SS NUT

002-0005 - 7/16" LOCK NUT

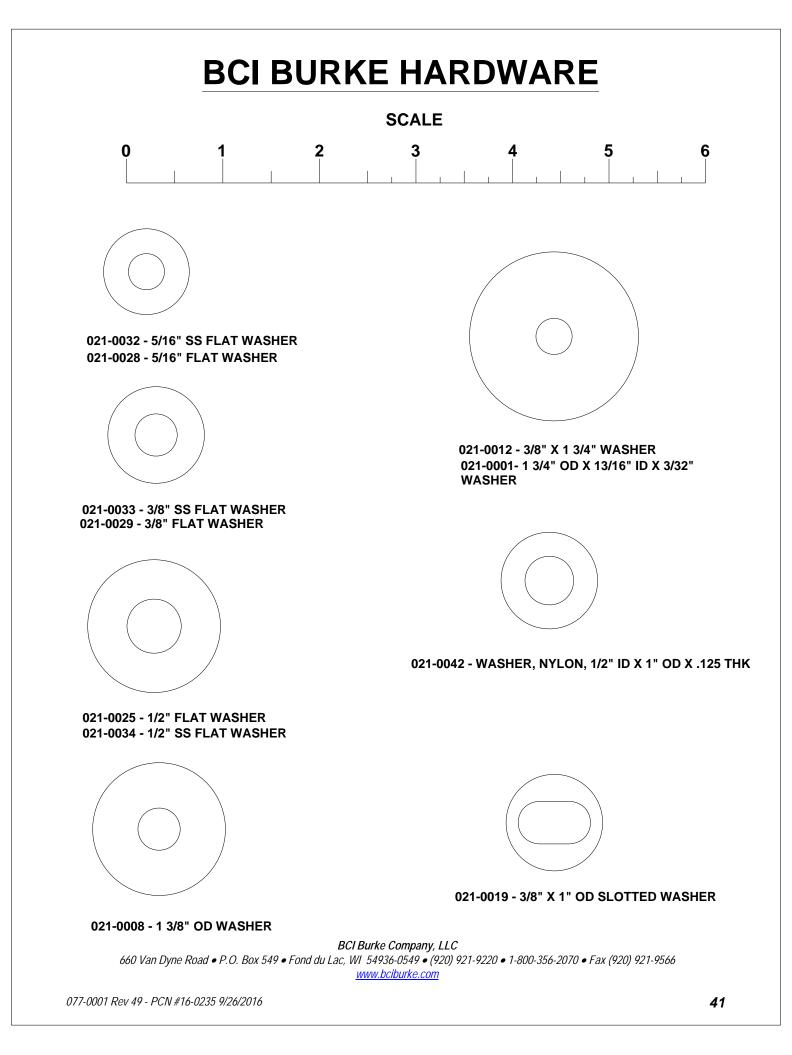
002-0004 - 1/2" LOCK NUT 002-0049 - 1/2" SS LOCK NUT

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077-0001 Rev 49 - PCN #16-0235 9/26/2016

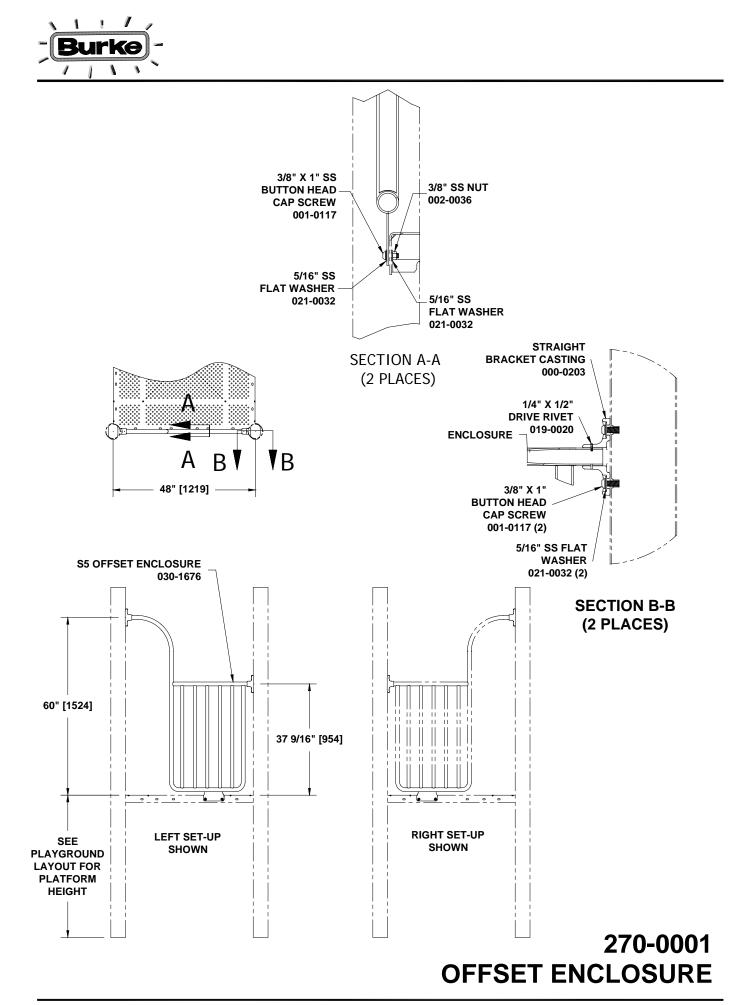


077-0001 Rev 49 - PCN #16-0235 9/26/2016



**Installation Instructions** 

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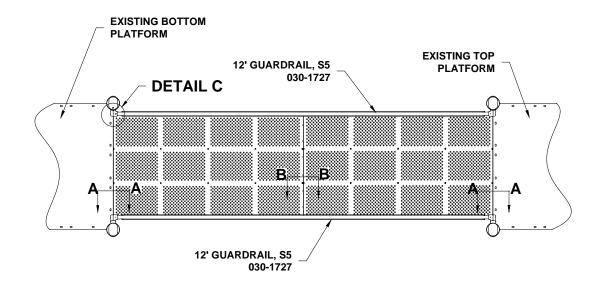


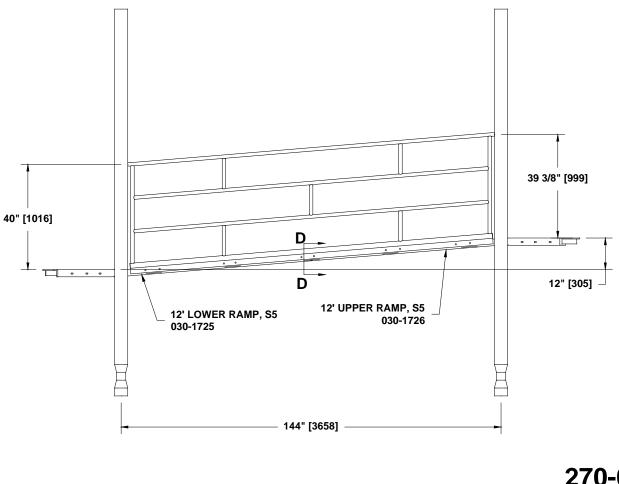
	PARTS LIST	1	SPECIFICATIONS
PART NO. 000-0203 030-1676 036-1284 Note: Hardw	ARTS LIST DESCRIPTION CASTING, STRAIGHT BRACKET S5 OFFSET ENCLOSURE HARDWARE PACKAGE	QTY 2 1	SPECIFICATIONS <u>CASTING, STRAIGHT BRACKET</u> : A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating. <u>S5 OFFSET ENCLOSURE</u> : One piece all welded construction consisting of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14 GA galvanized steel tubing, and 10 GA sheet steel. Finished with a baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.
that is not ne	ecessary for this installation.		SHIPPING WEIGHT: 30 LBS.

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

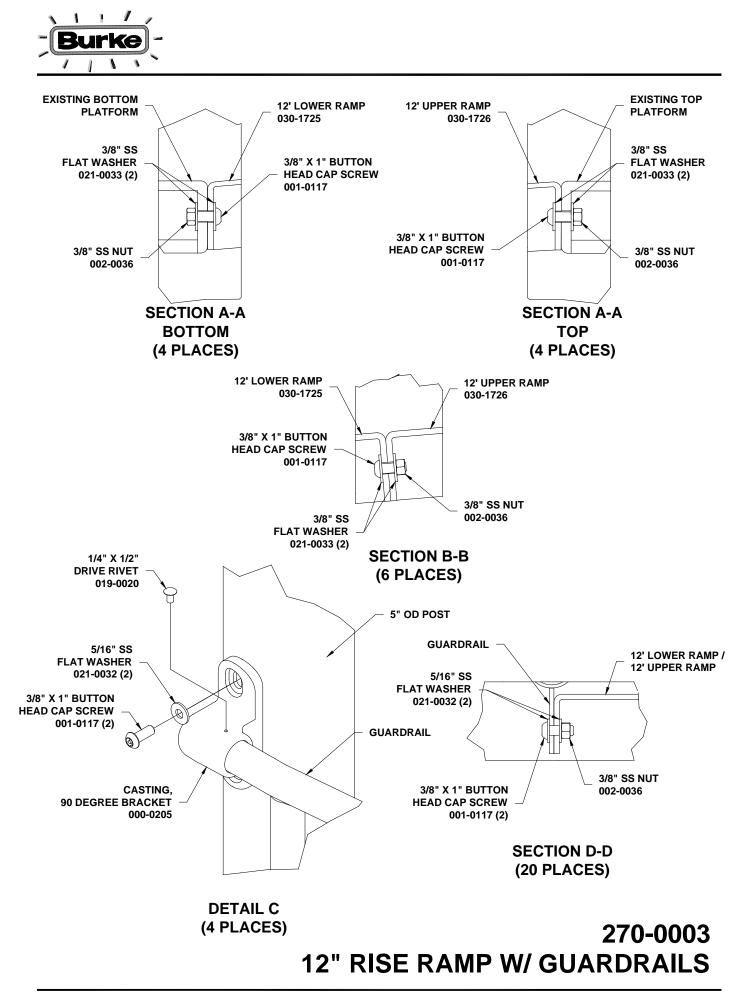
- 1. Locate holes for BRACKETS CASTINGS to 5" O.D. posts as per dimensions shown.
- 2. Insert bracket castings onto ends of OFFSET ENCLOSURE and attach bracket castings to 5" O.D. posts using 3/8" x 1" button head cap screws and 5/16" washers as shown. See SECTION B-B.
- 3. Attach bottom of pipe wall to platform using 3/8" x 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. Tighten all hardware. See SECTION A-A.
- 4. Drill 1/4" diameter holes through pilot hole in casting and into enclosure. See SECTION B-B.
- 5. Drive rivets flush with brackets.
- 6. Tighten All Hardware.







270-0003 12" RISE RAMP W/ GUARDRAILS



	— PARTS LIST ———		SPECIFICATIONS
030-1725 030-1726 030-1727 036-1114	DESCRIPTION CASTING, 90 DEGREE BRACKET 12' LOWER RAMP, S5 12' UPPER RAMP, S5 12' GUARDRAIL, S5 HARDWARE PACKAGE	<u>QTY</u> 4 1 2 1	SPECIFICATIONS         CASTING, 90 DEGREE BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.         12' LOWER RAMP, S5; 12' UPPER RAMP, S5: One piece all welded construction consisting of 12 GA surfaces and 7 GA gussets. PVC coated after fabrication.         12' GUARDRAIL, S5: One piece all welded construction consisting of 1.315" OD x 14 GA & 1.900" OD x 11 GA galvanized steel tubing and 12 GA. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.
	are package(s) may include extra hardv cessary for this installation.	vare	SHIPPING WEIGHT: 509 LBS.

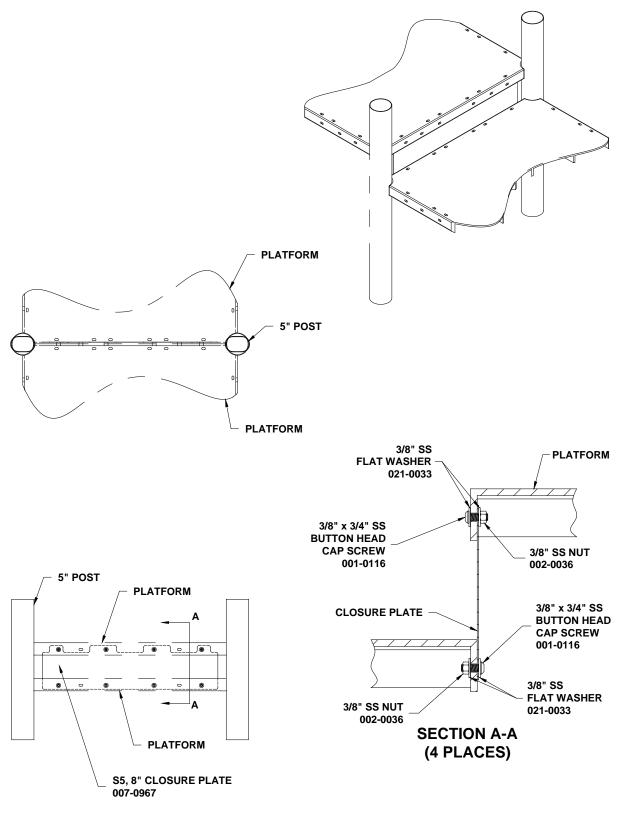
#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of 12" rise ramp.
- 2. Support upper of 12' lower ramp.
- 3. Attach 12' LOWER RAMP to existing lower platform using 3/8" X 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION A-A BOTTOM.
- 4. Attach 12' UPPER RAMP to existing upper platform and 12' lower ramp using 3/8" X 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION A-A TOP and SECTION B-B.
- 5. Attach 12' GUARDRAILS to 12' lower and upper ramps using 3/8" X 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. See SECTION D-D.
- 6. Sleeve CASTING, 90 DEGREE BRACKETS onto ends of guardrails and attach to 5" OD posts using 3/8" X 1" SS button head cap screws and 5/16" SS washers. See DETAIL C.
- 7. Tighten all hardware.
- 8. Drill 1/4" hole through castings and barriers using the dimple in the casting as a drill point. See DETAIL C.
- 9. Drive 1/4" rivet into hole. (4 places) See DETAIL C.

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

270-0003.doc Description: 12" RISE RAMP W/ GUARDRAILS REV: 02 PCN: 16-0282 12/8/2016





270-0050 8" CLOSURE PLATE

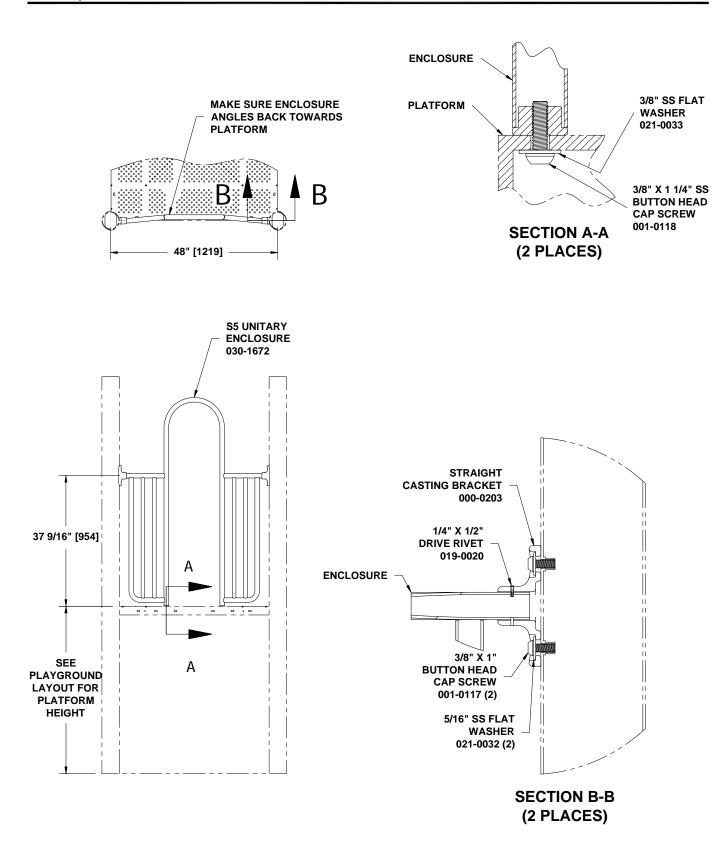
PART NO. 007-0967 036-1102	PARTS LIST DESCRIPTION S5 8" CLOSURE PLATE HARDWARE PACKAGE	<u>QTY</u> 1 1	SPECIFICATIONS           S5 8" CLOSURE PLATE: 14 GA galvanized steel plate           finished with a baked on powder coating.           HARDWARE PACKAGE: Stainless steeel
Note: Hardw that is not ne	are package(s) may include extr acessary for this installation.	a hardware	SHIPPING WEIGHT: 10 LBS.

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

- Attach CLOSURE PLATE to upper and lower platform using 3/8" x 3/4"SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. See SECTION A-A.
   Tighten hardware.

270-0050.doc Description: 8" CLOSURE PLATE REV: 02 PCN: 13-0089 5/10/2013



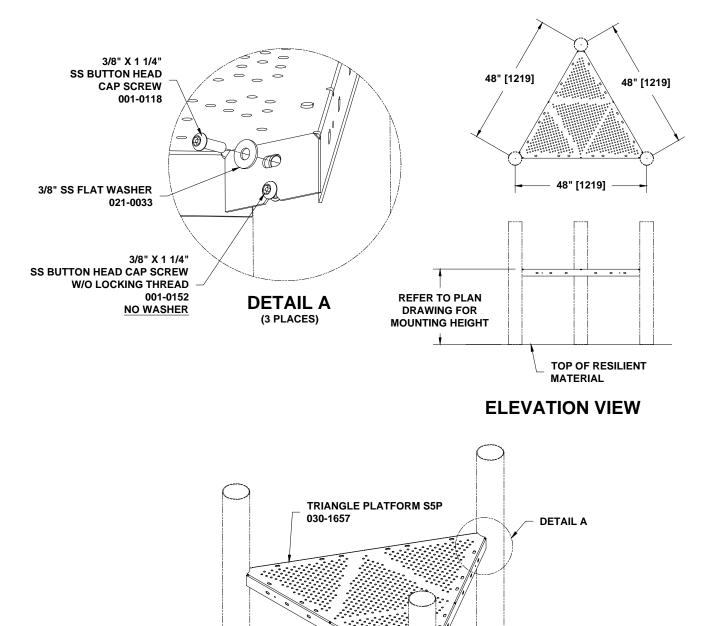


## 270-0112 UNITARY ENCLOSURE

	PARTS LIST		SPECIFICATIONS		
PART NO. 000-0203 030-1672 036-0197 036-0819	CASTING, STRAIGHT BRACKET S5 UNITARY ENCLOSURE HARDWARE PACKAGE HARDWARE PACKAGE	QTY 2 1 1	CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating. S5 UNITARY ENCLOSURE: One piece all welded construction consisting of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14 GA galvanized steel tubing, and HDPE threaded inserts. Finished with a baked on powder coating. HARDWARE PACKAGE: Stainless steel. HARDWARE PACKAGE: Aluminum Rivets		
	vare package(s) may include extra hardv ecessary for this installation.	vare	SHIPPING WEIGHT: 35 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. NOTE: Make sure enclosure angles back towards platform. (See Top View)					

- 1. Locate holes for CASTING BRACKETS to 5" O.D. posts as per dimensions shown.
- 2. Insert castings onto ends of UNITARY ENCLOSURE and attach top hole of brackets to 5" O.D. posts using 3/8" x 1" button head cap screws and 5/16" washers as shown. See SECTION B-B.
- 3. Rotate unitary enclosure up 90 degrees and attach bottom hole of brackets to 5" O.D. posts using 3/8" x 1" button head cap screws and 5/16" washers as shown. See SECTION B-B.
- 4. Rotate unitary enclosure down 90 degrees and attach to platform using 3/8" x 1 1/4" button head cap screws and 3/8" washers as shown. Tighten screws. See SECTION A-A. See FRONT VIEW.
- 5. Drill 1/4" diameter hole through pilot hole in brackets through enclosure. Insert DRIVE RIVET. Drive rivets flush.
- 6. Tighten all Hardware.



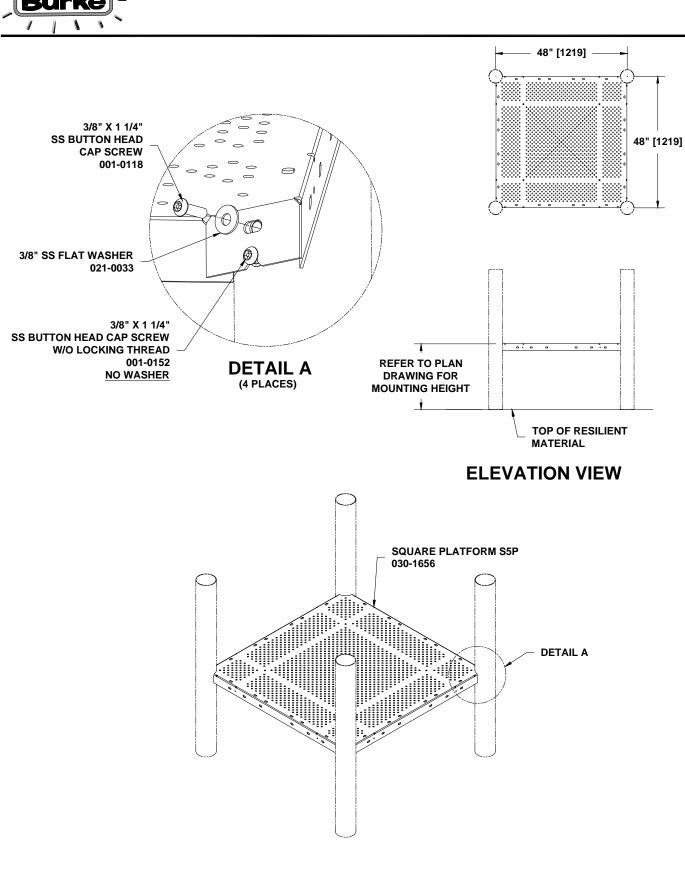


270-0129 TRIANGLE PLATFORM S5P

	= PARTS LIST		SPECIFICATIONS
	PARTS LIST DESCRIPTION NANGLE PLATFORM S5P ROWARE PACKAGE	<u>QTY</u> 1 1	SPECIFICATIONS           TRIANGLE PLATFORM S5P:         12 GA HRPO sheet, finished with a PVC Coating           HARDWARE PACKAGE:         Stainless steel
Note: Hardware that is not neces	package(s) may include extra sary for this installation.	hardware	SHIPPING WEIGHT: 48 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 TRIANGLE PLATFORM S5P 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.



## 270-0130 SQUARE PLATFORM S5P

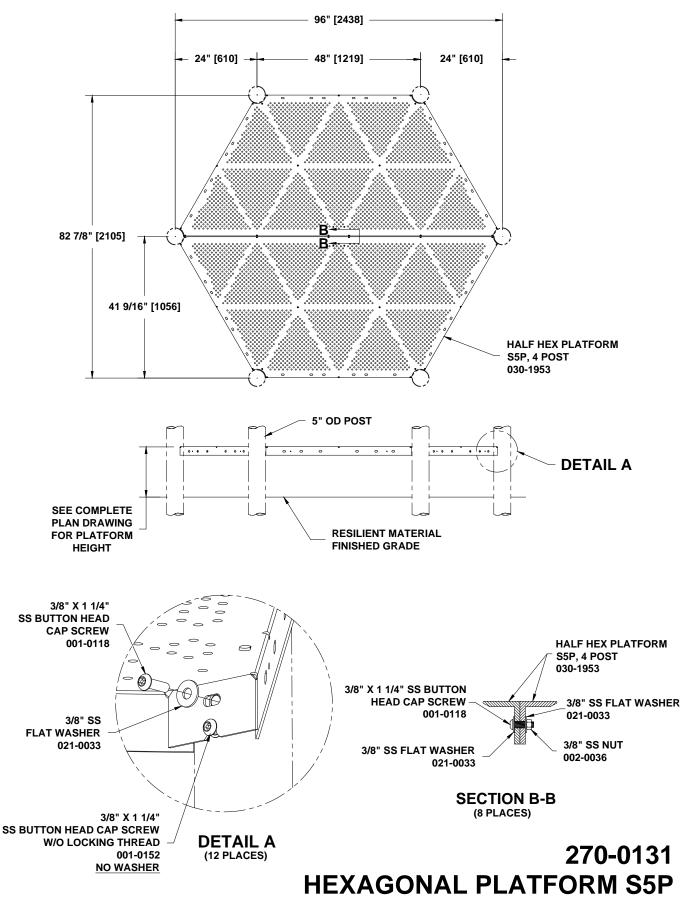
	— PARTSLIST —		SPECIFICATIONS
PART NO. 030-1656 036-1101	PARTS LIST DESCRIPTION SQUARE PLATFORM S5P HARDWARE PACKAGE	<u>QTY</u> 1 1	SPECIFICATIONS SQUARE PLATFORM S5P: 12 GA HRPO sheet, finished with a PVC Coating HARDWARE PACKAGE: Stainless steel
Note: Hardw that is not n	ware package(s) may include extra ecessary for this installation.	a hardware	SHIPPING WEIGHT: 106 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 four corners of the 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.
- 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.

270-0130.doc Description: SQUARE PLATFORM REV: 01 PCN: 13-0089 5/10/2013



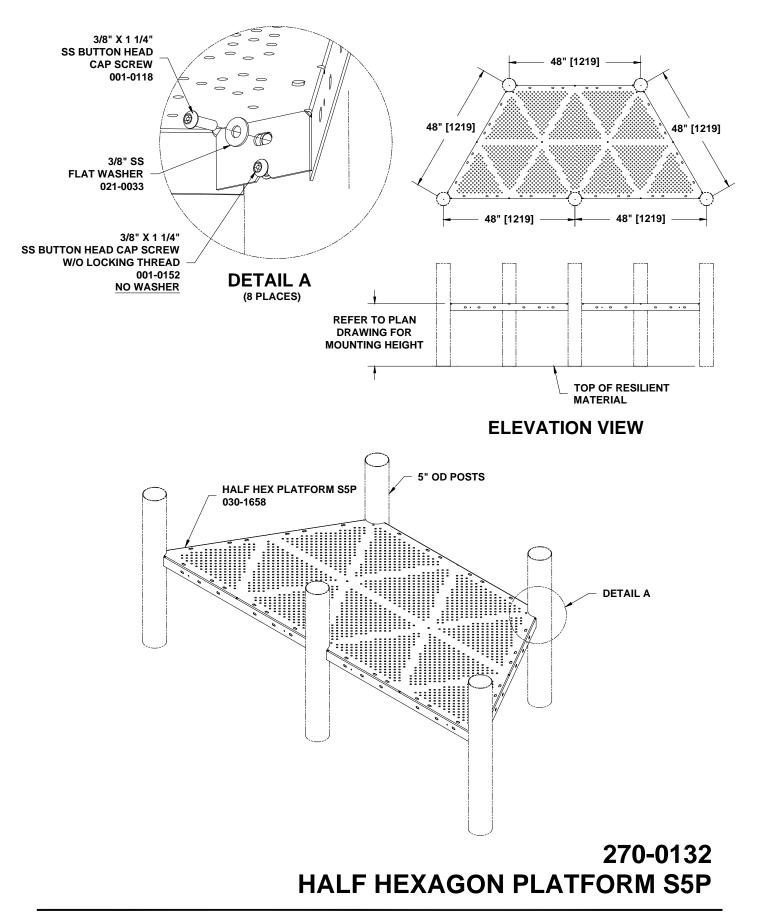


PART NO. 030-1953 036-1108	PARTS LIST DESCRIPTION HALF HEX 4 POST S5 PLATFORM HARDWARE PACKAGE	<u>QTY</u> 2 1	SPECIFICATIONS         HALF HEX 4 POST S5 PLATFORM: One piece platform all welded construction consisting of 12 GA surfaces, gussets, and corner plates. PVC coated after fabrication.         HARDWARE PACKAGE: Stainless steel
Note: Hardw that is not no	vare package(s) may include extra hardv ecessary for this installation.	/are	SHIPPING WEIGHT: 287 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 four corners of the HALF HEX PLATFORM onto the partially threaded cap screws on each post.
- 4. Complete attaching platforms 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. Attach other section to hex platforms using 3/8" x 1 1/4" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nut. Note: If this unit gets a hex roof, place roof on posts before cementing. See SECTION B-B.
- 6. Level platform and plumb posts.
- 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.



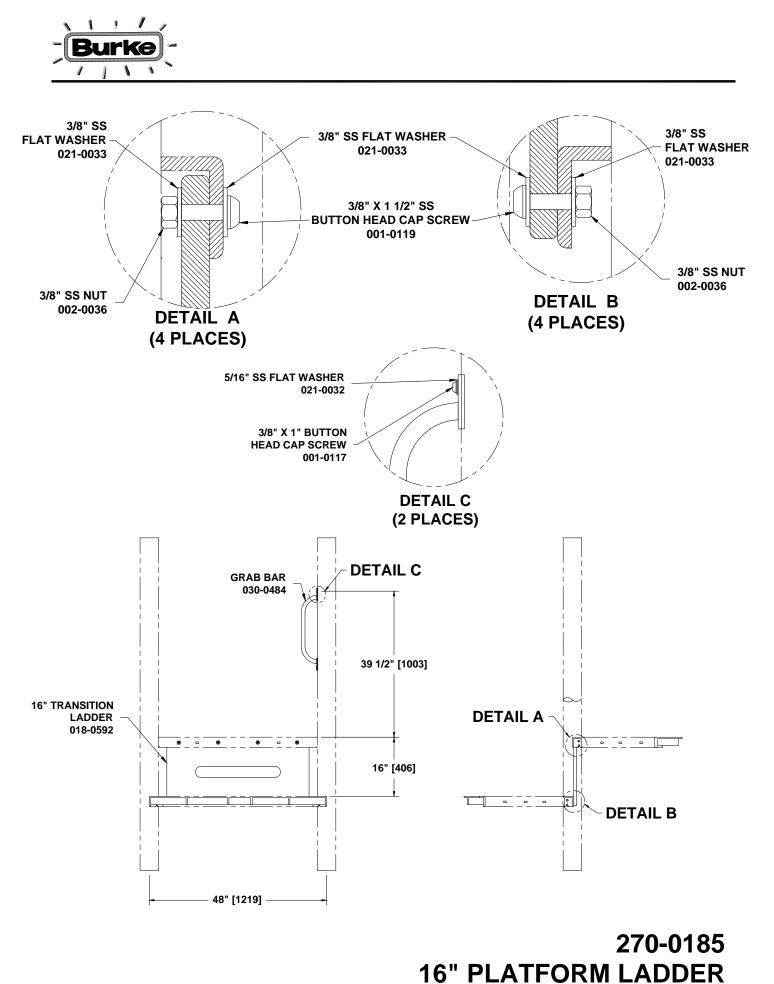


	— PARTS LIST —		SPECIFICATIONS
PART NO. 030-1658 036-1101	PARTS LIST DESCRIPTION HALF HEX PLATFORM S5P HARDWARE PACKAGE	<u>QTY</u> 1 2	SPECIFICATIONS <u>HALF HEX PLATFORM S5P</u> : 12 GA HRPO sheet, finished with a PVC Coating <u>HARDWARE PACKAGE</u> : Stainless steel
Note: Hardw that is not ne	vare package(s) may include extra ecessary for this installation.	hardware	SHIPPING WEIGHT: 144 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 four corners of the HALF HEX 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.
- 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.

270-0132.doc Description: HALF HEXAGON PLATFORM REV: 01 PCN: 13-0089 5/10/2013

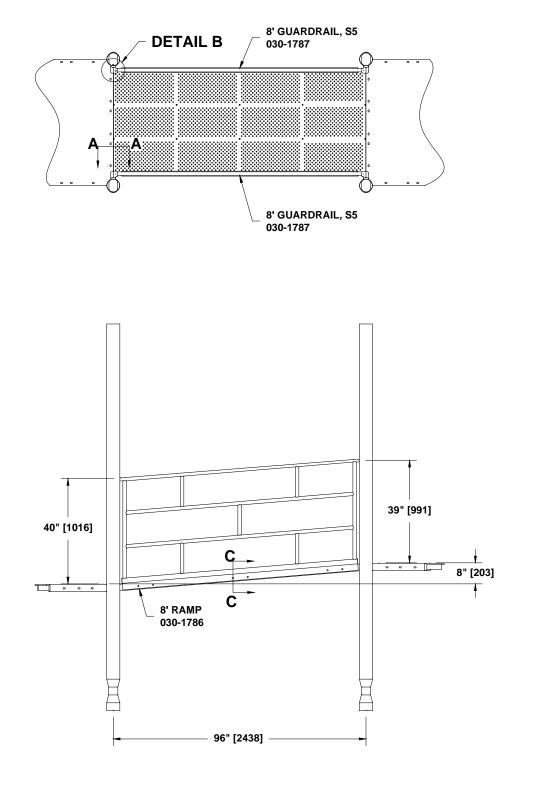


			SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	16" TRANSITION LADDER: 3/4" HDPE
018-0592 030-0484 036-0258 036-0448	16" TRANSITION LADDER GRAB BAR HARDWARE PACKAGE HARDWARE PACKAGE	1 1 2	GRAB BAR: One piece all welded construction consisting of 1.029" OD x 14 GA galvanized steel tubing and formed 3/16" stainless steel plates. Finished with a baked on powder coating. HARDWARE PACKAGE: HARDWARE PACKAGE: Stainless steel.
	ware package(s) may include extr ecessary for this installation.	a hardware	SHIPPING WEIGHT: 10 LBS.

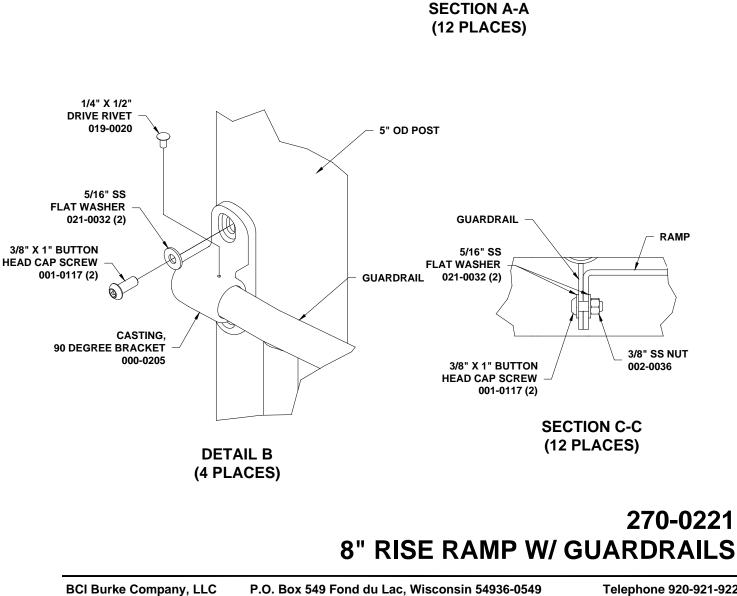
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

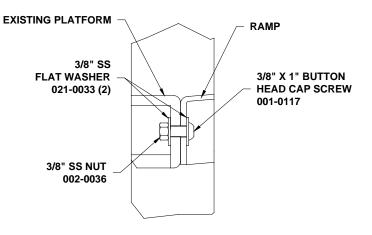
- Attach 16" TRANSITION LADDER to upper and lower platform using 3/8" X 1 1/2" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. See DETAIL A and DETAIL B.
- Attach GRAB BAR using 3/8" X 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL C.
- 3. Tighten all hardware.





270-0221 8" RISE RAMP W/ GUARDRAILS







Telephone 920-921-9220

	PARTS LIST		SPECIFICATIONS
PART NO. 000-0205 030-1786 030-1787 036-1114	DESCRIPTION CASTING, 90 DEGREE BRACKET 8' RAMP 8' GUARDRAIL, S5 HARDWARE PACKAGE	<u>QTY</u> 4 1 1	SPECIFICATIONS         CASTING, 90 DEGREE BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.         8' RAMP: One piece all welded construction consisting of 12 GA surfaces and 7 GA gussets. PVC coated after fabrication.         8' GUARDRAIL, S5: One piece all welded construction consisting of 1.315" OD x 14 GA & 1.900" OD x 11 GA galvanized steel tubing and 12 GA. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.
	are package(s) may include extra hardwecessary for this installation.	vare	SHIPPING WEIGHT: 356 LBS.

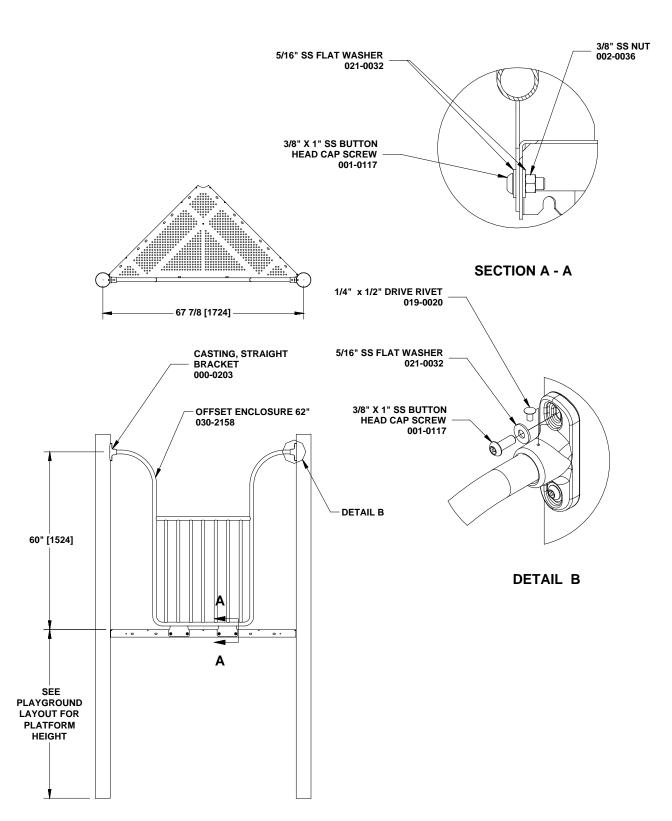
#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of 8" rise ramp.
- 2. Attach 8' RAMP to existing lower and upper platform using 3/8" X 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION A-A.
- 3. Attach 8' GUARDRAILS to ramp using 3/8" X 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. See SECTION C-C.
- 4. Sleeve CASTING, 90 DEGREE BRACKETS onto ends of barriers and attach to 5" OD posts using 3/8" X 1" SS button head cap screws and 5/16" SS washers. See DETAIL B.
- 5. Tighten all hardware.
- 6. Drill 1/4" hole through castings and barriers using the dimple in the casting as a drill point. See DETAIL B.
- 7. Drive 1/4" rivet into hole. See DETAIL B.

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

270-0221.doc Description: 8" RISE RAMP W/ GUARDRAILS REV: 02 PCN: 13-0299 1/14/2014





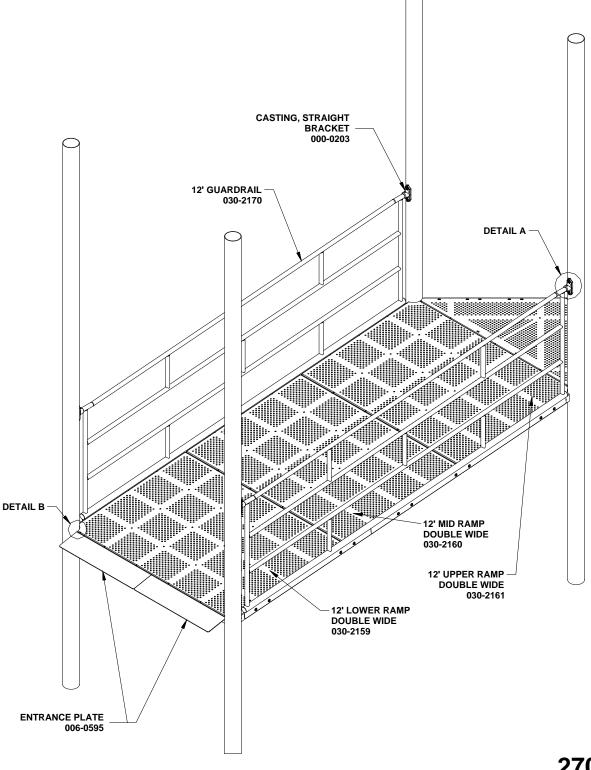
### 270-0268 CENTERED ENCLOSURE 62"

	— PARTS LIST —		SPECIFICATIONS
PART NO. 000-0203 030-2158 036-0258 036-0806 036-0819	PARTS LIST <u>DESCRIPTION</u> CASTING, STRAIGHT BRACKET CENTERED ENCLOSURE 62" HARDWARE PACKAGE HARDWARE PACKAGE HARDWARE PACKAGE	<u>QTY</u> 2 1 4 1	SPECIFICATIONS         CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating.         CENTERED ENCLOSURE 62": One piece all welded construction consisting of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14 GA galvanized steel tubing, and 10 GA sheet steel. Finished with a baked on powder coating.         HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless steel.         HARDWARE PACKAGE: Aluminum Rivets
	ecessary for this installation.		SHIPPING WEIGHT: 43 LBS.

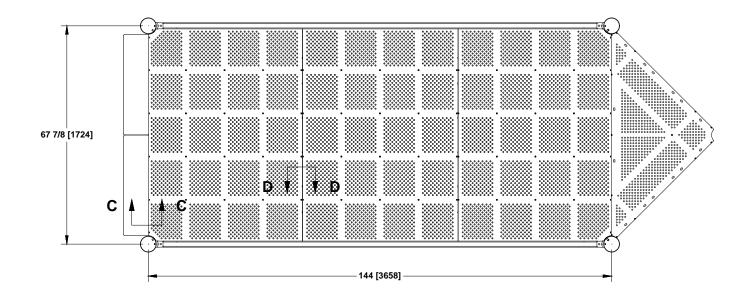
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

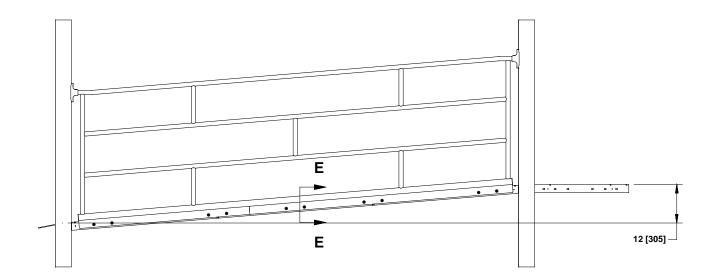
- 1. Locate holes for BRACKET CASTINGS on 5" O.D. posts as per dimensions shown.
- 2. Insert bracket castings onto ends of CENTER MOUNT ENCLOSURE and attach bracket castings to 5" O.D. posts using hardware specified in DETAIL B.
- 3. Attach bottom of enclosure to platform using hardware specified in SECTION A-A.
- 4. Drill 1/4" diameter holes through pilot hole in casting and into enclosure. See DETAIL B.
- 5. Drive rivets flush with brackets.
- 6. Tighten All Hardware.





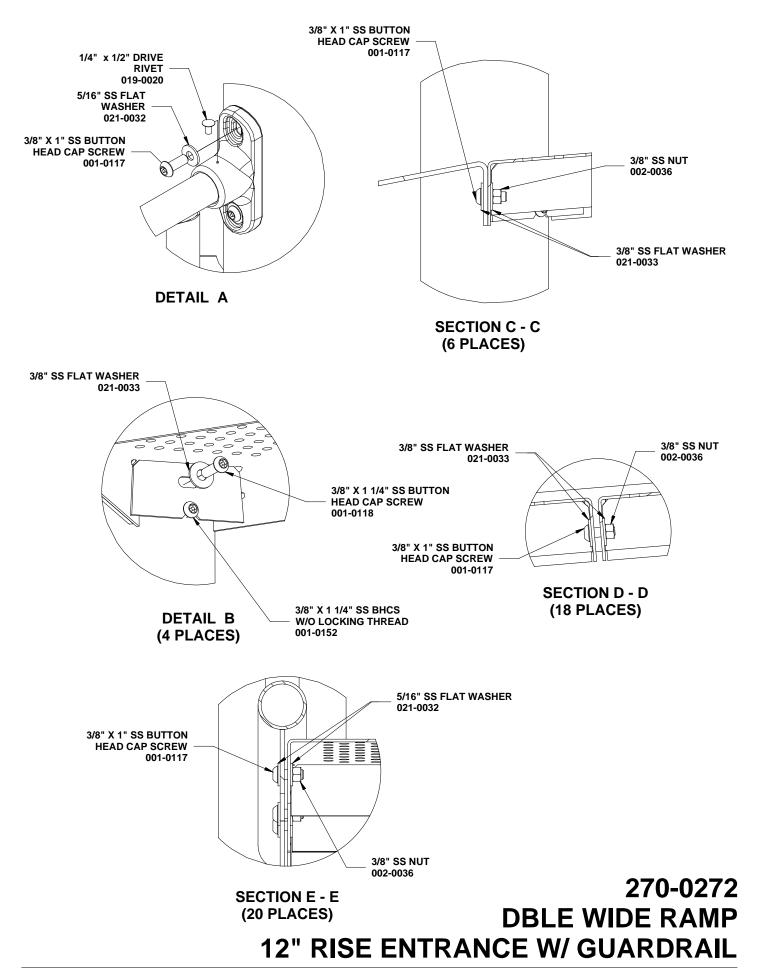
### 270-0272 DBLE WIDE RAMP 12" RISE ENTRANCE W/ GUARDRAIL





# 270-0272 DBLE WIDE RAMP 12" RISE ENTRANCE W/ GUARDRAIL

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



	PARTS LIST	1	SPECIFICATIONS
PART NO. 000-0203 006-0595 030-2159 030-2160 030-2161 030-2170 036-1115	PARTS LIST DESCRIPTION CASTING, STRAIGHT BRACKET ENTRANCE PLATE 12' LOWER RAMP DOUBLE WIDE 12' MID RAMP DOUBLE WIDE 12' UPPER RAMP DOUBLE WIDE 12' GUARDRAIL HARDWARE PACKAGE	<b>QTY</b> 4 2 1 1 1 2 1	<ul> <li><u>CASTING, STRAIGHT BRACKET</u>: A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating.</li> <li><u>ENTRANCE PLATE</u>: 7 GA HR steel. PVC coated after fabrication.</li> <li><u>12' LOWER RAMP DOUBLE WIDE</u>: 12' MID RAMP DOUBLE WIDE; 12' UPPER RAMP DOUBLE WIDE: One piece all welded construction consisting of 12 GA surfaces and 7 GA gussets. PVC coated after fabrication.</li> <li><u>12' GUARDRAIL</u>: One piece all welded construction</li> </ul>
			consisting of 1.315" OD x 14 GA & 1.900" OD x 11 GA galvanized steel tubing and 12 GA. Finished with a baked on powder coating.
			washers and aluminum rivets with 302 stainless steel pin.
	vare package(s) may include extra hardw ecessary for this installation.	/are	SHIPPING WEIGHT: 776 LBS.

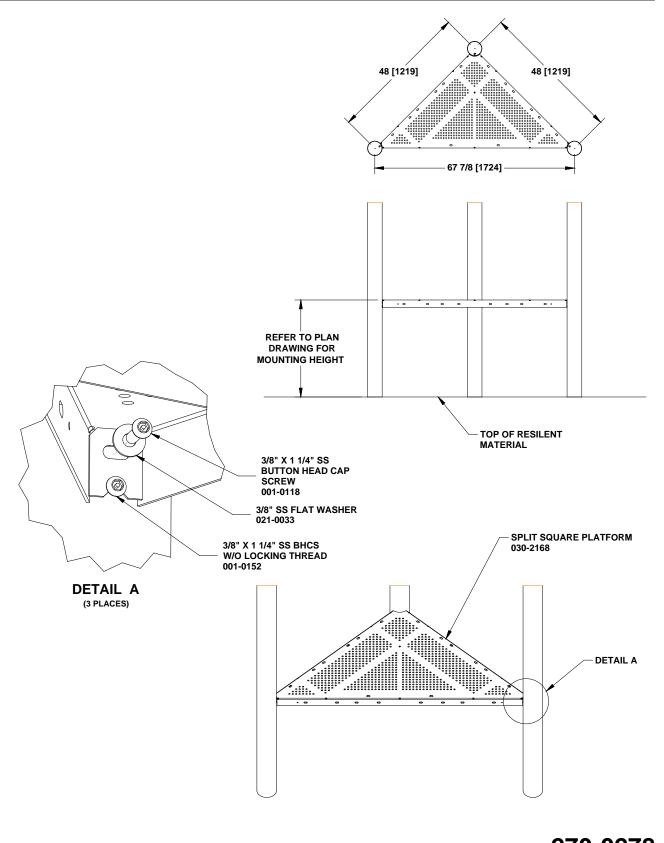
#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of 12" rise ramp.
- 2. Partially thread a 3/8" x 1 ¼" 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 B.
- 3. Slide the two corners of the 12" UPPER RAMP DOUBLE WIDE onto the partially threaded cap screws on each post.
- 4. Place a temporary support underneath the unfastened section of the ramp.
- Attach 12" UPPER RAMP DOUBLE WIDE to 5" OD post using 3/8" X 1 1/4" SS button head cap screws, 3/8" SS washers. See DETAIL B.
- 6. Attach 12" MID RAMP DOUBLE WIDE to 12" UPPER RAMP DOUBLE WIDE using 3/8" X 1" SS button head cap screws, 3/8" SS NUT, and 3/8" SS WASHER. See SECTION D D.
- 7. Attach 12" LOWER RAMP DOUBLE WIDE to 5" OD post by repeating steps 2, 3, 4 and using 3/8" X 1 1/4" SS button head cap screws, 3/8" SS washers. See DETAIL B. Additionally attach 12" LOWER RAMP DOUBLE WIDE to 12" MID RAMP DOUBLE WIDE using 3/8" X 1" SS button head cap screws, 3/8" SS NUT, and 3/8" SS WASHER. See SECTION D D.
- 8. Sleeve CASTING, STRAIGHT BRACKET onto ends of 12' GUARDRAIL and attach to 5" OD posts using 3/8" X 1" SS button head cap screws and 5/16" SS washers. See DETAIL A.
- Attach 12' GUARDRAIL to 12' LOWER, MID and UPPER ramps using 3/8" X 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. See SECTION E - E.
- 10. Attach ENTRANCE PLATE to 12" LOWER RAMP DOUBLE WIDE using 3/8" X 1" SS button head cap screws 3/8" SS NUT and 3/8" SS washers. See SECTION C C.
- 11. Tighten all hardware.
- 12. Drill 1/4" hole through castings and 12' GUARDRAIL using the dimple in the casting as a drill point. See DETAIL A.
- 13. Drive 1/4" rivet into hole. See DETAIL A.

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

270-0272.doc Description: DBLE WIDE RAMP 12" RISE ENTRANCE W/ GUARDRAIL REV: 02 PCN: 13-0299 1/14/2014





270-0278 SINGLE SPLIT SQUARE PLATFORM 62"

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

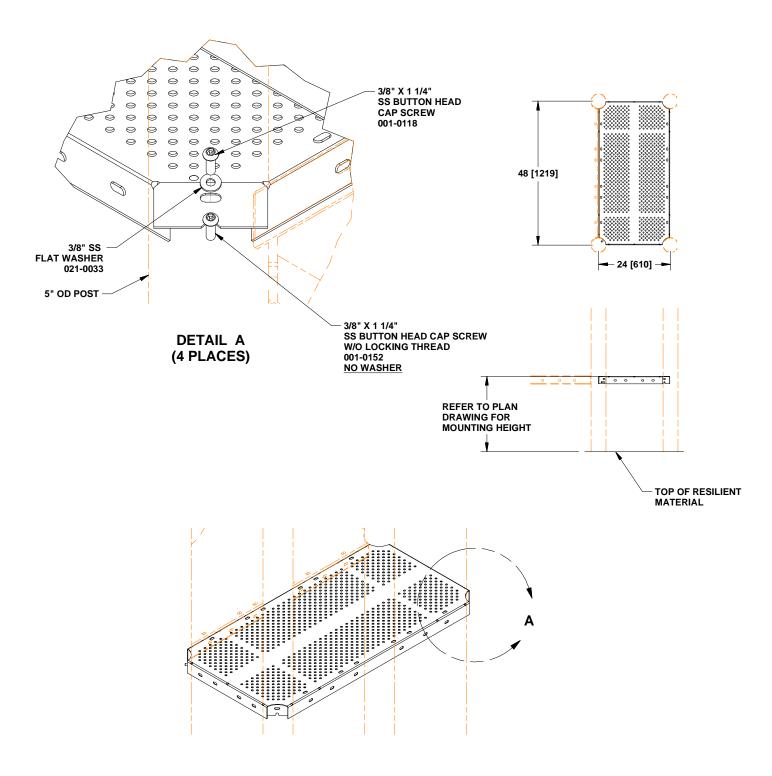
PART NO. 030-2168 036-1100	PARTS LIST DESCRIPTION SPLIT SQUARE PLATFORM HARDWARE PACKAGE	<u>QTY</u> 1 1	SPECIFICATIONS SPLIT SQUARE PLATFORM: 12 GA HRPO sheet, finished with a PVC Coating HARDWARE PACKAGE: Stainless steel
Note: Hardv that is not n	ware package(s) may include extra ha ecessary for this installation.	rdware	SHIPPING WEIGHT: 48 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.
- 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.





	PARTS LIST =		SPECIFICATIONS
PART NO.	DESCRIPTION	QTY	HALF PLATFORM: 12 GA HRPO sheet, finished with a PVC
NOTE: Ha	HALF PLATFORM HARDWARE PACKAGE		HARDWARE PACKAGE: Stainless steel SHIPPING WEIGHT: 56.6 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 four corners of the SQUARE PLATFORM onto the partially threaded cap screws on each post.

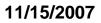
4. Complete attaching platform to posts by using 3/8" x 1 1/4" SS button head cap screws and 3/8" SS flat washers to secure platform into upper mounting hole. See DETAIL A.

5. Level platform and plumb posts.

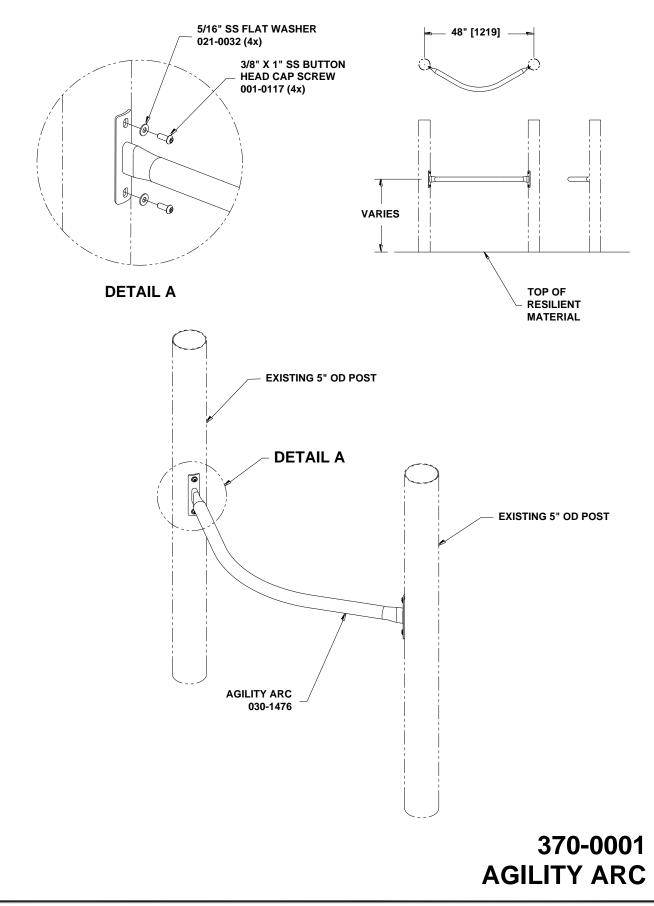
6. Tighten all hardware.

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

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



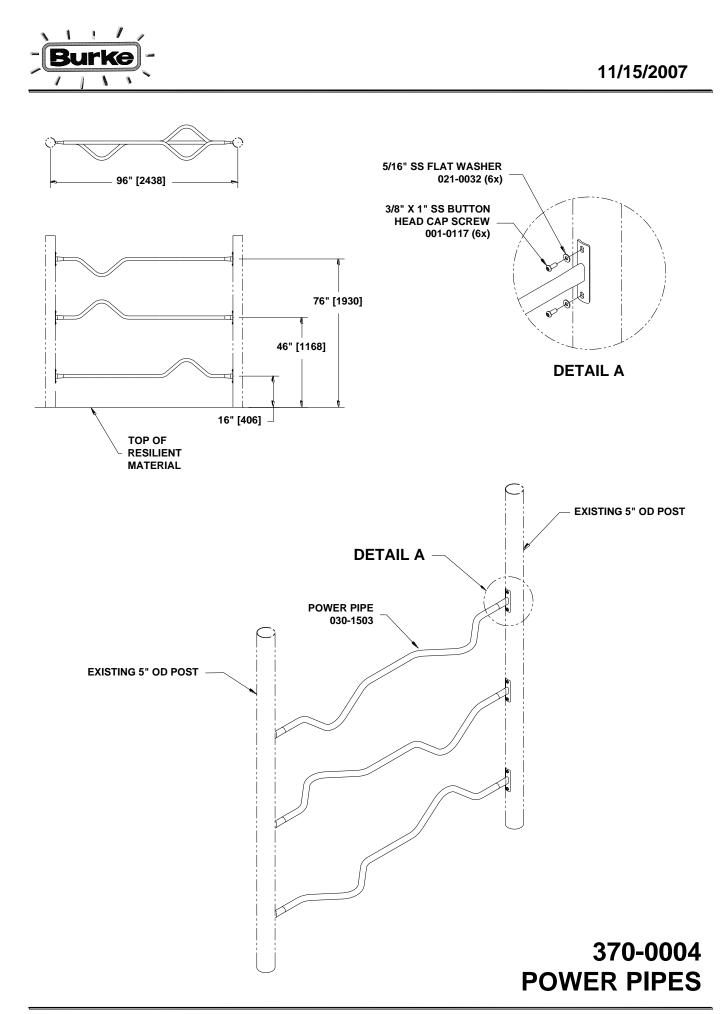




	— PARTS LIST —		SPECIFICATIONS
PART NO. 030-1476 036-0258	PARTS LIST DESCRIPTION AGILITY ARC HARDWARE PACKAGE	<u>QTY</u> 1 2	SPECIFICATIONS AGILITY ARC: One piece all welded construction consisting of formed 1.900" OD x 11 GA and 7 GA stainless steel sheet. Finished with a baked on powder coating. HARDWARE PACKAGE: Stainless steel.
	are package(s) may include extr ecessary for this installation.	a hardware	SHIPPING WEIGHT: 12 LBS.

- 1. Attach AGILITY ARC 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.

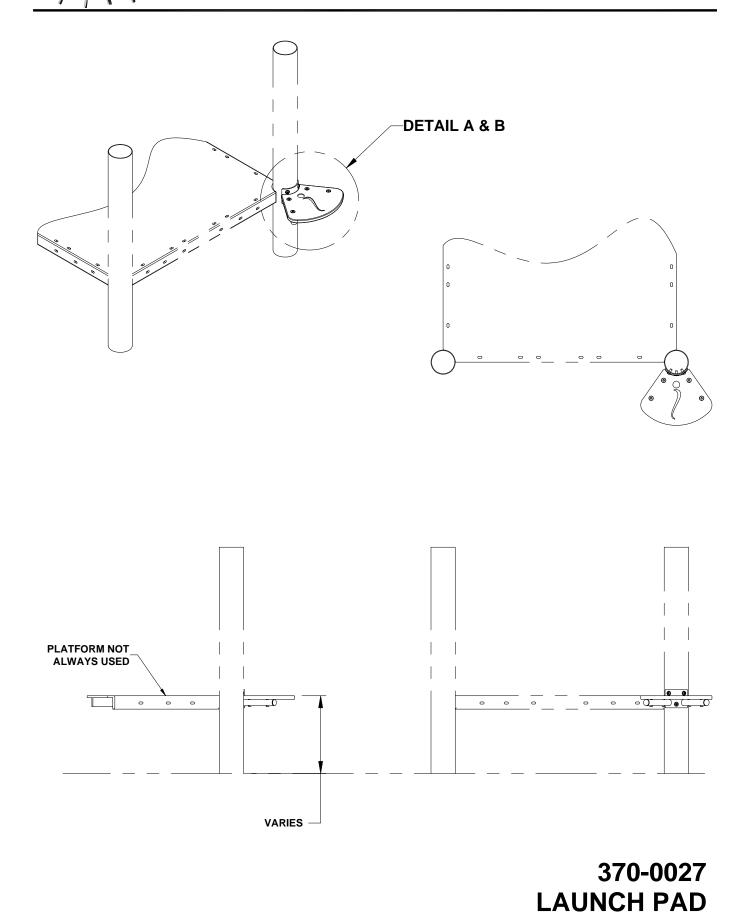
370-0001.doc Description: AGILITY ARC REV: 00 PCN: 07-0013 11/15/2007



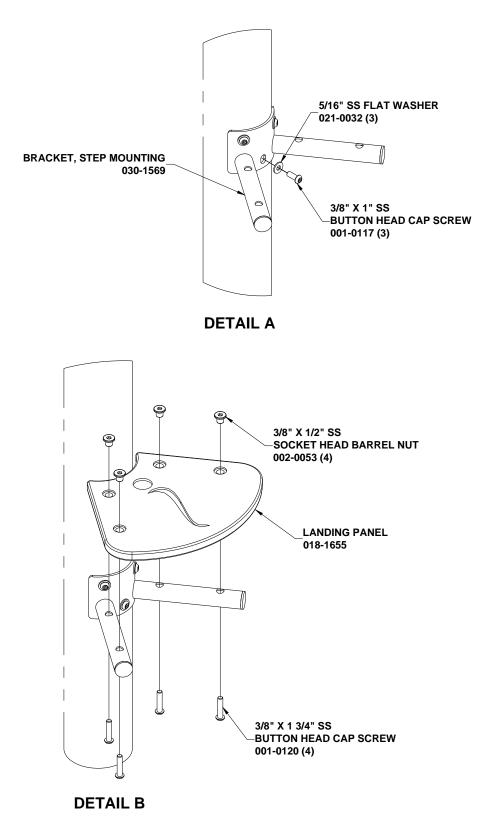
	— PARTS LIST —		SPECIFICATIONS
PART NO. 030-1503 036-0258	PARTS LIST DESCRIPTION POWER PIPE HARDWARE PACKAGE	<u>QTY</u> 3 6	SPECIFICATIONS         POWER PIPE: One piece all welded construction consisting of formed 1.600" OD x 12 GA galvanized steel tubing and 7 GA stainless steel sheet. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel.
Note: Hardw that is not no	vare package(s) may include extr ecessary for this installation.	a hardware	SHIPPING WEIGHT: 48 LBS.

- 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







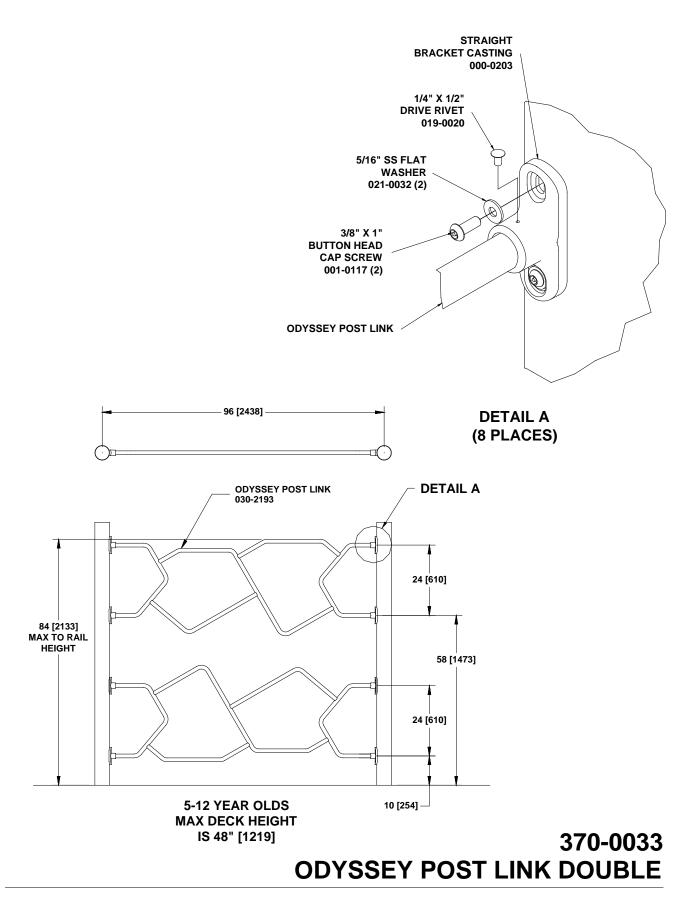


	— PARTS LIST —		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	LANDING PANEL: 3/4" co-extruded HDPE.
018-1655 030-1569 036-0258 036-1014	LANDING PANEL BRACKET, STEP MOUNTING HARDWARE PACKAGE HARDWARE PACKAGE	1 2 1	<ul> <li><u>BRACKET, STEP MOUNTING</u>: One piece all welded construction consisting of 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.</li> <li><u>HARDWARE PACKAGE</u>: Stainless steel.</li> <li><u>HARDWARE PACKAGE</u>: Stainless steel button head cap screws, washers, &amp; barrel nuts .</li> </ul>
	vare package(s) may include extra hat ecessary for this installation.	ardware	SHIPPING WEIGHT: 10 LBS.

- 1. Attach STEP MOUNTING BRACKET to post using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- 2. Attach LANDING PANEL to Step Mounting Bracket using 3/8" x 1 3/4" SS button head cap screws. See DETAIL B.
- 3. Plumb and level components. Tighten all hardware.
- 4. INSTALL RESILIENT SURFACING MATERIAL IN ACCORDANCE TO INSTALLATION GUIDELINES.



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

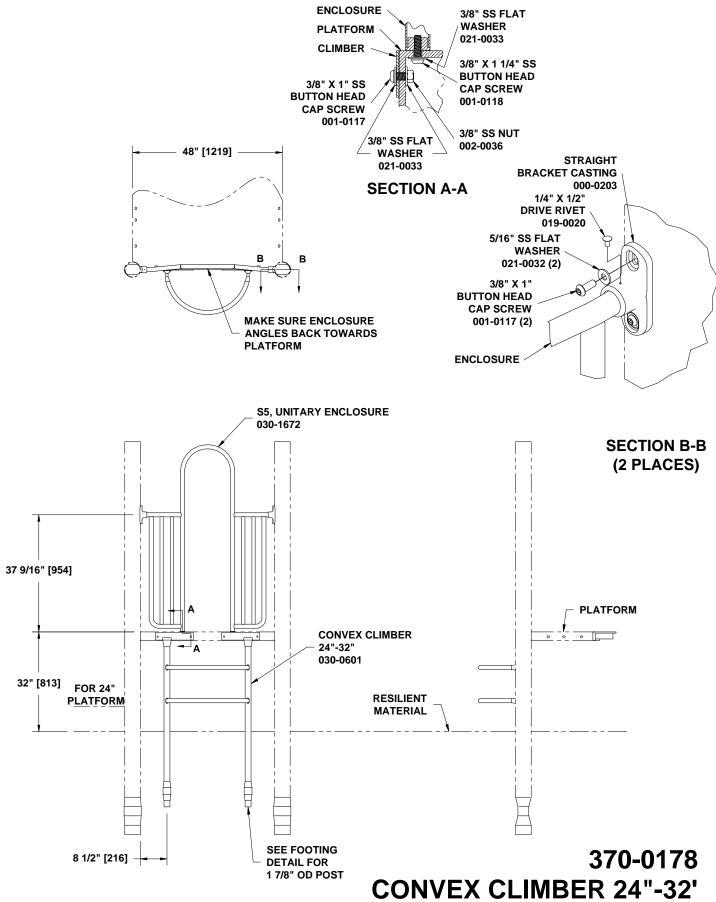


	PARTS LIST		Г	SPECIFICATIONS
PART NO. 000-0203 030-2193 036-0258 036-0819	DESCRIPTION CASTING, STRAIGHT BRACKET ODYSSEY POST LINK HARDWARE PACKAGE HARDWARE PACKAGE	<u>QTY</u> 8 2 8 4		SPECIFICATIONS CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating. ODYSSEY 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.

- 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 Burke

11/5/2010



PARTS LIST		SPECIFICATIONS
PARTS LISTPART NO.DESCRIPTION000-0203CASTING, STRAIGHT BRACKET030-0601CONVEX CLIMBER 24"-32"030-1672S5 UNITARY ENCLOSURE036-0018HARDWARE PACKAGE036-0819HARDWARE PACKAGE	QTY 2 1 1 1	<ul> <li><u>CASTING, STRAIGHT BRACKET</u>: A356-T6 Aluminum, Heat-Treated. Finished with baked on powder coating.</li> <li><u>CONVEX CLIMBER 24"-32"</u>: One piece all welded construction consisting of 1.315" OD x 14 GA &amp; 1.900" OD x 11 GA galvanized steel tubing, and 10 GA galvanized steel plate. Finished with a baked on powder coating.</li> <li><u>S5 UNITARY ENCLOSURE</u>: One piece all welded construction consisting of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14 GA galvanized steel tubing, and HDPE threaded inserts. Finished with a baked on powder coating.</li> </ul>
Note: Hardware package(s) may include extra hard that is not necessary for this installation.	ware	HARDWARE PACKAGE: Stainless steel screws, washers and nuts. HARDWARE PACKAGE: Aluminum Rivets SHIPPING WEIGHT: 77 LBS.

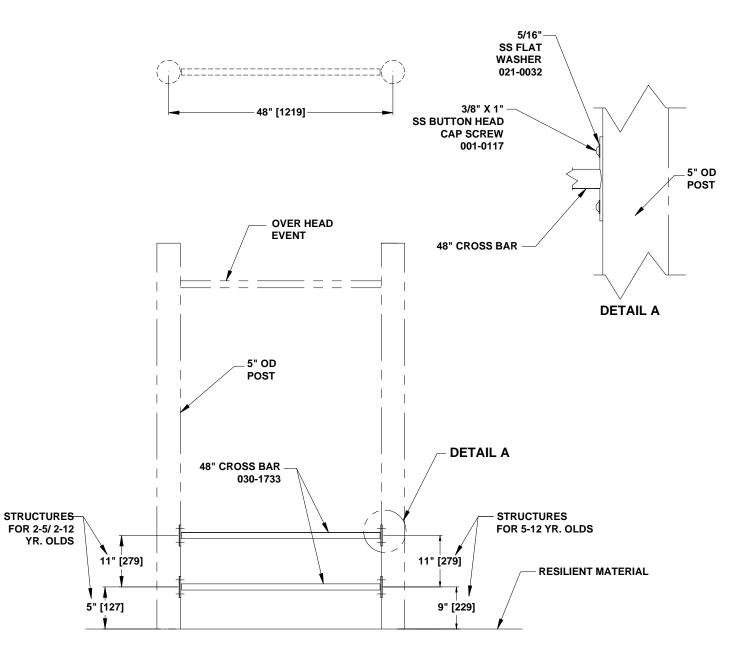
<u>NOTE:</u> Plastisol coating may need to be removed from mounting holes on platform before installing this climber. NOTE: Make sure enclosure angles back towards platform. (See Top View)

- 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. Locate mounting holes for UNITARY ENCLOSURE on 5" O.D. posts.
- Set CASTING, S5, STRAIGHT BRACKET onto ends of UNITARY ENCLOSURE. Position unitary enclosure with brackets into opening. Install 3/8" x 1" BUTTON HEAD CAP SCREWS and 5/16" WASHERS through upper holes of brackets and into 5" O.D. posts. See SECTION B-B.
- 4. Rotate unitary enclosure up 90 degrees and install 3/8" x 1" BUTTON HEAD CAP SCREWS and 5/16" WASHERS into bottom holes of bracket. See SECTION B-B. Tighten all hardware.
- 5. Rotate unitary enclosure down to align holes in platform with unitary enclosure nutserts.
- 6. Attach unitary enclosure to platform using 3/8" x 1 1/4" BUTTON HEAD CAP SCREWS and 3/8" WASHERS. See SECTION A-A. Tighten bolts.
- 7. Drill 1/4" diameter holes through pilot hole in casting and into unitary enclosure. See SECTION B-B.
- 8. Drive rivets flush with brackets and handrails.
- 9. Tighten all hardware.
- 10. Position CONVEX CLIMBER into footing hole.
- 11. Attach CONVEX CLIMBER to platform using 3/8" x 1" BUTTON HEAD CAP SCREWS, 3/8" WASHERS and 3/8" NUTS. See Section A-A. Tighten all hardware.
- 12. Block-up and plumb.
- 13. Pour concrete and allow concrete to set for 2-3 days.

370-0178.doc Description: CONVEX CLIMBER 24"-32" REV: 01 PCN: 10-0270 11/5/2010

14. Install resilient surfacing material.



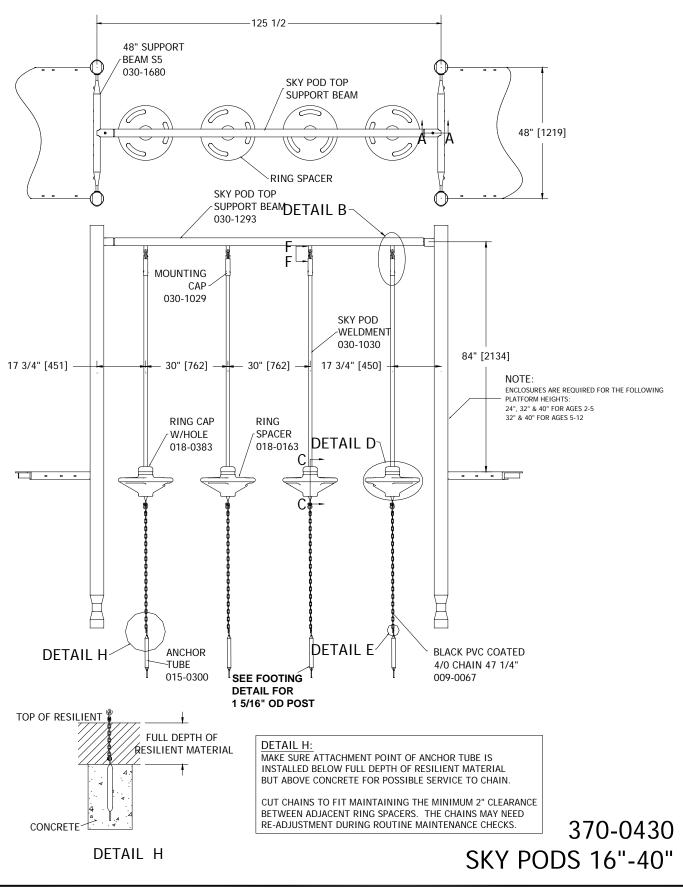




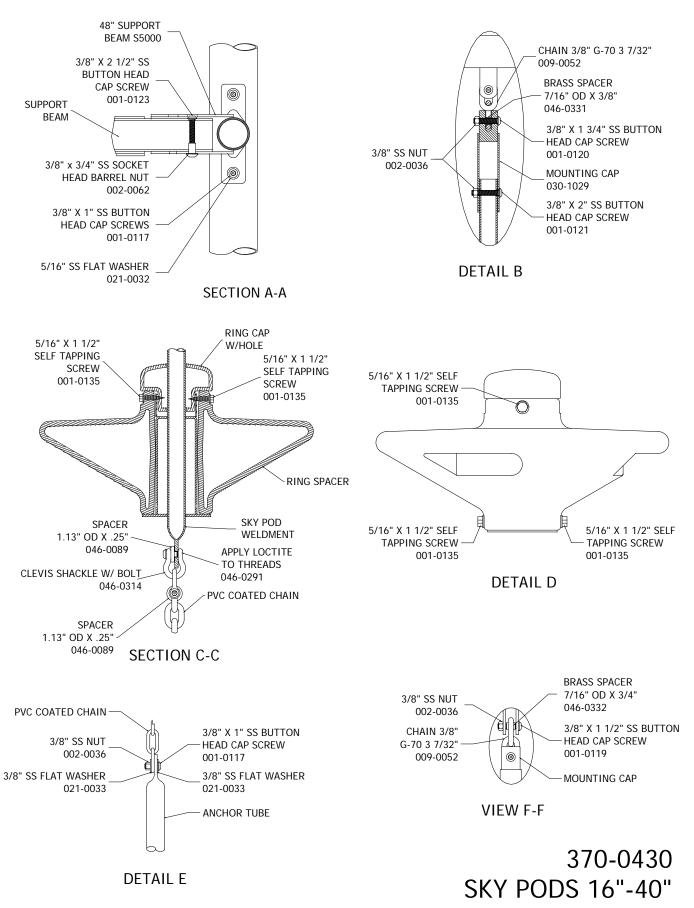
	PARTS LIST		SPECIFICATIONS		
PART NO. 030-1733 036-0258	PARTS LIST <u>DESCRIPTION</u> 48" CROSS BAR HARDWARE PACKAGE	QTY 2 4	SPECIFICATIONS <u>48" CROSS BAR</u> : One piece all welded construction consisting of 1.315" OD, 14 GA galvanized steel tubing and 7 GA stainless steel plate. Finished with a baked 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.









	PARTS LIST		
PART NO.	DESCRIPTION	QTY	CHAIN 3/8" G-70 3 7/32": 3/8" chain, yellow dichromate finish.
			BLACK PVC COATED 4/0 CHAIN 47 1/4": Galvanized 4/0 straight coil chain with Black PVC coating.
009-0052	CHAIN 3/8" G-70 3 7/32"	4	ANCHOR TUBE : 1.315" OD x 12 GA galvanized steel tubing.
009-0067	BLACK PVC COATED 4/0 CHAIN 47 1/4"	4	RING SPACER: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction and a textured surface.
015-0300	ANCHOR TUBE	4	RING CAP W/HOLE: Linear, low density rotationally molded, U.V. stabilized, polyethylene, .250" thick, single
018-0163	RING SPACER	4	wall construction. Textured outside surface.
018-0383	RING CAP W/HOLE	4	MOUNTING CAP: One piece all welded construction consisting of 1018 HR steel and 1 9/16" OD x 13 GA CRS DOM tubing. Finished with a baked on powder coating.
030-1029	MOUNTING CAP	4	
030-1030	SKY POD WELDMENT	4	SKY POD WELDMENT: One piece all welded construction consisting of 1.315" OD x 12 GA galvanized steel tubing; 3" x 3" x 11 GA 1018 square steel tubing; and 7 GA & 10 GA steel plate. Finished with a baked on
030-1293	SKY POD TOP SUPPORT BEAM	1	powder coating.
030-1680	SUPPORT BEAM 5" POSTS	2 2	SKY POD TOP SUPPORT BEAM: One piece all welded construction consisting of 2 3/8" OD x 10 GA, 2 7/8" OD x 8 GA galvanized steel tubing and 8 GA galvanized steel plate. Finished with a baked on powder coating.
036-0734	HARDWARE PACKAGE	2	SUPPORT BEAM 5" POSTS: One piece all welded construction consisting of 2 3/8" OD x 10 GA & 2 7/8" OD x
036-0771	HARDWARE PACKAGE	2	8 GA galvanized steel tubing, and formed 3/16" stainless steel plates. Finished with a baked on powder coating.
036-0785	HARDWARE PACKAGE	1	HARDWARE PACKAGE: Stainless steel button head cap screws, nuts and flat washers; zinc plated steel hex
036-0788	HARDWARE PACKAGE	4	head cap screws, self tapping screws and lock washers.
036-0828	HARDWARE PACKAGE	1	HARDWARE PACKAGE: Stainless steel screws, nuts, and washers.
046-0089	SPACER 1.13" OD X .25"	8	HARDWARE PACKAGE: Stainless steel screws and washers.
046-0291	LOCTITE	1	HARDWARE PACKAGE: 5/16" Shackle with a 3/8" X 1 5/32" bolt.
046-0331	BRASS SPACER 7/16" OD X 3/8"	4	HARDWARE PACKAGE: Stainless steel.
046-0332	BRASS SPACER 7/16" OD X 3/4"	4	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 3/8"; BRASS SPACER 7/16" OD X 3/4": Brass Tube 7/16" OD X .028" Wall
Note: Hardv	vare package(s) may include extra hardw	are	
	ecessary for this installation.		SHIPPING WEIGHT: 188 LBS.

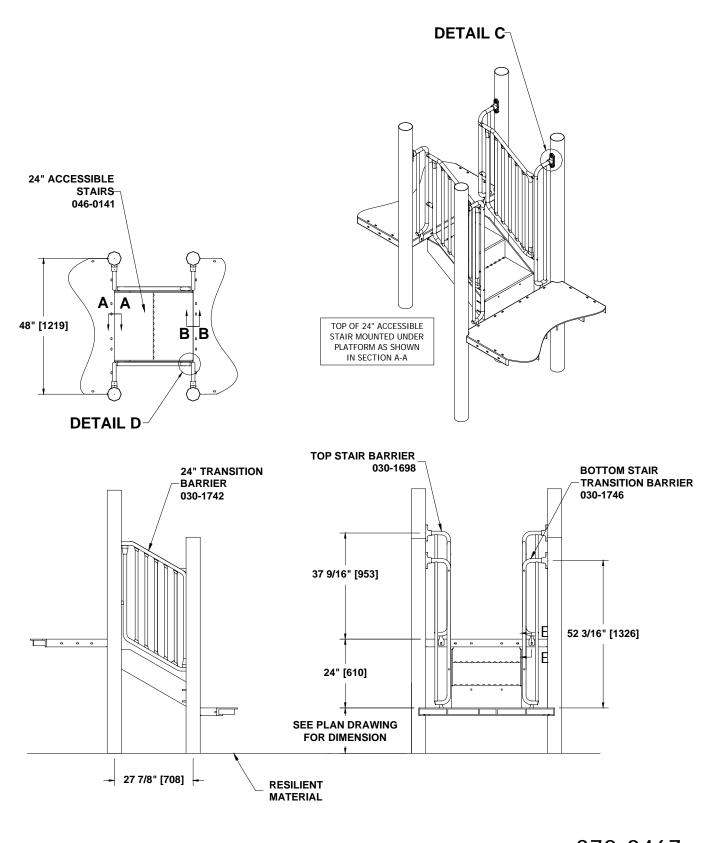
# NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

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

- Dig footing holes per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual. 1.
- 2. Attach first SUPPORT BEAM to posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See SECTION A-A.
- Insert the SKY POD TOP SUPPORT BEAM into the end of the first support beam. See SECTION A-A. 3.
- Sleeve the second support beam over the end of the sky pod top support beam and attach second support beam to posts using 3/8" x 1" SS 4 button head cap screws and 5/16" SS flat washers. Tighten hardware. See SECTION A-A.
- Fasten support beam to sky pod top support beam using a 3/8" x 2 1/2" SS button head cap screw and a 3/8" X 3/4" SS Socket Head Barrel 5. Nut. Tighten hardware. See SECTION A-A.
- Slide ring spacer down into position over sky pod weldments ensuring that the flats on the ring spacers are aligned with the plates on the sky 6. pod weldments. Drill 1/4" holes through ring spacers and sky pod weldments. Insert 5/16" x 1 1/2" self-tapping screws into 1/4" holes and tighten against plastic. NOTE: Do not over tighten to prevent damage. See DETAIL D.
- 7. Slide ring caps into position on ring spacers. Drill 1/4" holes through ring spacers, the plate on the weldments and the ring caps. Insert 5/16" x 1 1/2" self-tapping screws into 1/4" holes and tighten against plastic. See SECTION C-C and DETAIL D.
- 8. Attach 2-link chain to the mounting caps using 3/8" x 1 3/4" SS button head cap screws, 1/2" OD x 3/8" spacers and 3/8" SS nuts. Tighten hardware. See DETAIL B.
- Slide mounting caps onto upper end of sky pod assemblies and attach using 3/8" x 2" SS button head cap screws, and 3/8" SS nuts. Tighten 9 hardware. See DETAIL B.
- 10. Attach sky pod assemblies to the support beam by the 2 link chains. Attach using 1 1/2" SS button head cap screws, 7/16" OD X 3/4" BRASS SPACERS and 3/8" SS nuts. Tighten hardware. See VIEW F-F.
- 11. Assemble clevises and sky pod weldment using the CLEVIS SHACKLE W/ BOLT. Apply LOCTITE to threads before installing. See SECTION C-C.
- 12. Fasten pvc coated chain to 18" tube using 3/8" x 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. Tighten hardware. See DETAIL E. NOTE: See DETAIL H to determine anchor tube attachment point for loose fill and unitary rubber surface. NOTE: Cut chains to fit maintaining the minimum 2" clearance between adjacent ring spacers. The chains may need re-adjustment during routine maintenance checks.
- 13. Verify sky pods are hanging straight down.
- 14. Pour concrete and allow concrete to set for 2-3 days.
- 15. After concrete has set, chains may need re-adjustment to retain the 2" clearance between adjacent ring spacers.
- 16. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines

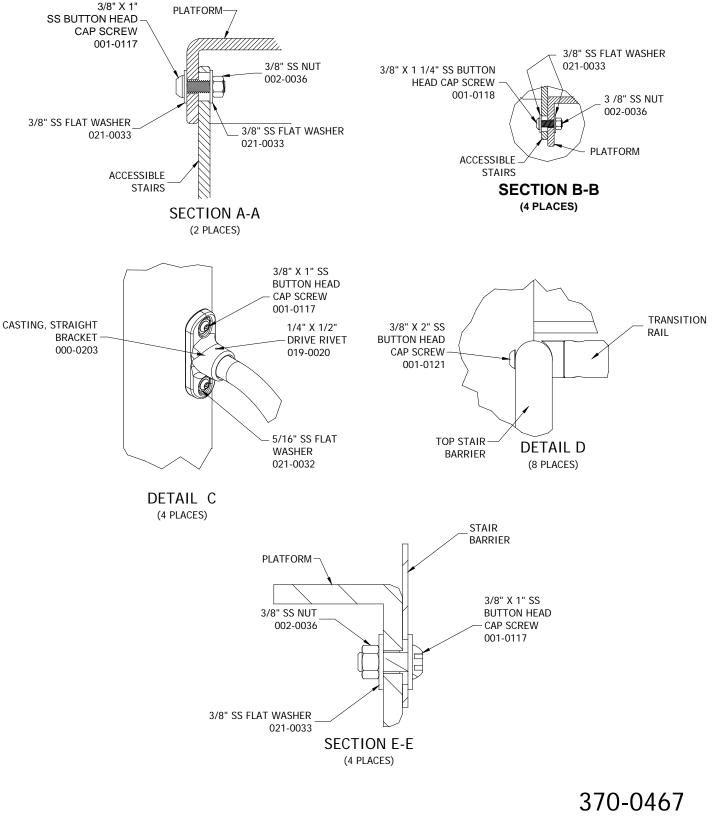
370-0430.doc Description: SKY PODS 16"-40" REV: 03 PCN: 13-0251 11/4/2013





# 370-0467 24" TRANSITION STAIR W/BARRIERS





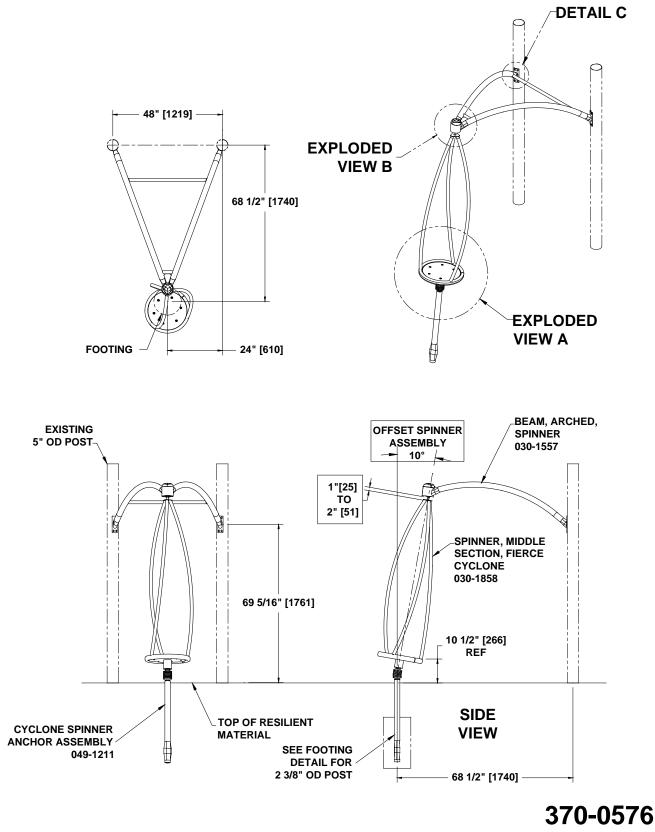
24" TRANSITION STAIR W/BARRIERS

	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat-
000-0203 030-1698	CASTING, STRAIGHT BRACKET TOP STAIR BARRIER	4	Treated. Finished with baked on powder coating.
030-1698	24" TRANSITION BARRIER	2 2 2	TOP STAIR BARRIER: One piece all welded construction
030-1746	BOTTOM STAIR TRANSITION	2	consisting of 1.315" OD x 12 GA & 1.029" OD x 12 GA galvanized steel tubing and 10 GA galvanized steel plate.
036-1125	BARRIER HARDWARE PACKAGE	1	Finished with a baked on powder coating.
046-0141	24" ACCESSIBLE STAIRS	1	
			24" TRANSITION BARRIER: One piece all welded construction consisting of 1.315" OD x 12 GA & 1.029" OD x 12 GA galvanized steel tubing, malleable iron plug and 10 GA galvanized steel plate. Finished with a baked on powder coating.
			BOTTOM STAIR TRANSITION BARRIER: 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 & washers and aluminum rivets with 302 stainless steel pin.
			<u>24" ACCESSIBLE STAIRS</u> : One piece all welded construction consisting of 12 GA HRPO steel surfaces, sides, and gussets. PVC coated after fabrication.
	vare package(s) may include extra hardw ecessary for this installation.	vare	SHIPPING WEIGHT: 161 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.

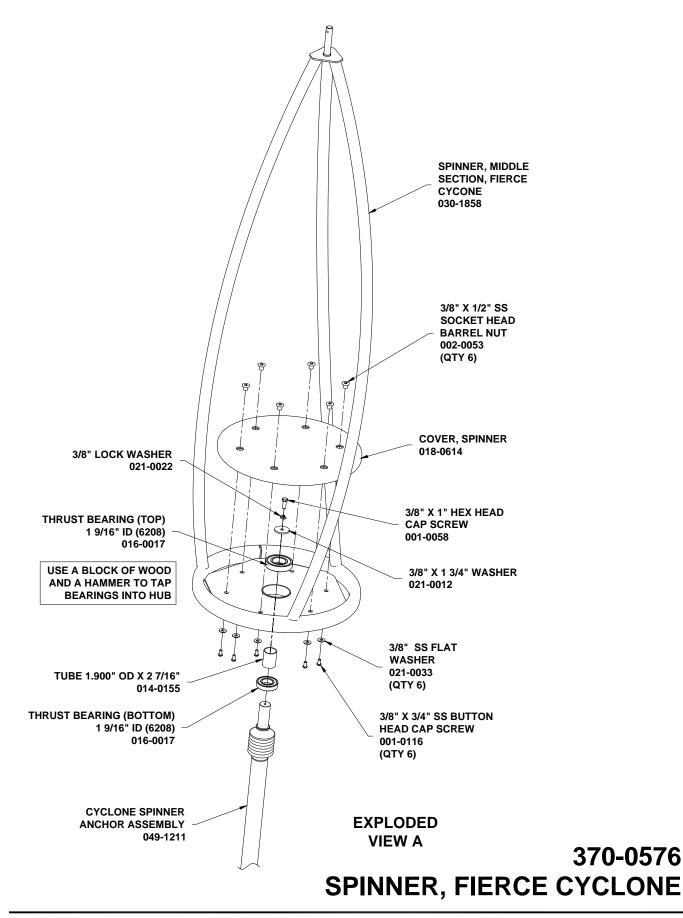
- 1. Install platforms. See appropriate installation instructions.
- Attach 24" ACCESSIBLE STAIRS to upper platform using 3/8" x 1 " SS button head cap screw, 3/8" SS flat washers and 3/8" SS nuts. NOTE: Make sure the stairs are centered between the posts. See SECTION A-A.
- 3. Attach 24" accessible stairs to lower platform using 3/8" x 1 1/4" SS button head cap screw, 3/8" SS flat washers and 3/8" SS nuts. **NOTE: Make sure the stairs are centered between the posts.** See SECTION B-B.
- 4. Attach STRAIGHT BRACKET CASTINGS to 5" OD posts using 3/8" x 1" SS button head cap screws and 5/16" SS washers. See DETAIL C.
- 5. Attach TOP STAIR BARRIER to 24" TRANSITION BARRIER using 3/8" x 2" SS button head cap screws. See DETAIL D.
- Attach BOTTOM STAIR TRANSITION BARRIER to 24" TRANSITION BARRIER using 3/8" x 2" SS button head cap screws. See DETAIL D
- Sleeve TOP STAIR BARRIER and BOTTOM STAIR TRANSITION BARRIER into straight bracket castings. Attach bottom of barriers to platforms using 3/8" x 1" SS button head cap screw, 3/8" SS flat washers and 3/8" SS nuts. See FRONT PAGE of this installation print for orientation. Also see DETAIL C and SECTION E-E.
- 8. Repeat steps 5 thru 7 for the opposite side of the stair.
- 9. Tighten all hardware.
- 10. Drill 1/4" diameter holes thru brackets and barriers. Insert 1/4" diameter drive rivets and pound center pins flush to engage rivets. Apply touch up paint to exposed heads of rivets.
- 11. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



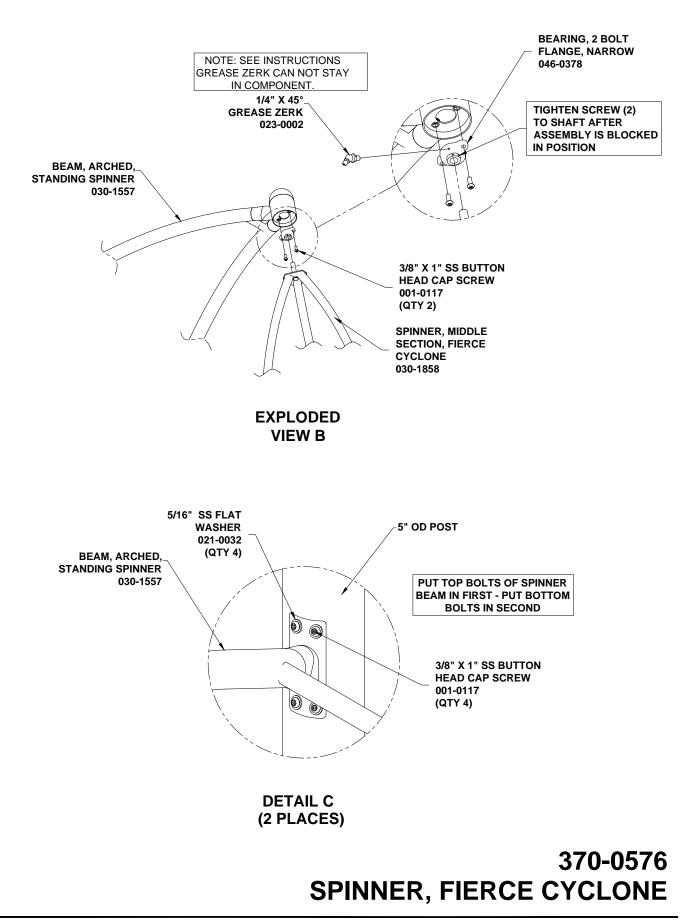


SPINNER, FIERCE CYCLONE









	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	TUBE, 1.900" OD X 11 GA X 2 7/16": 1.900" OD x 11 GA galvanized steel tube.
014-0155	TUBE, 1.900" OD X 11 GA X 2 7/16"	1	THRUST BEARING 1 9/16" ID: Heavy duty, precision thrust, sealed ball
016-0017	THRUST BEARING 1 9/16" ID	2	bearing.
018-0614	COVER, SPINNER	1	COVER, SPINNER: 3/4" extruded HDPE
023-0002	1/4" X 45° GREASE ZERK	1	COVER, SPINNER: 3/4 exiluded HDPE
030-1557	BEAM, ARCHED, SPINNER	1	<u>1/4" X 45° GREASE ZERK</u> : Zinc plated steel.
030-1858	SPINNER, MIDDLE SECTION, FIERCE CYCLONE	1	BEAM, ARCHED, SPINNER: One piece all welded construction consisting of
036-0258	HARDWARE PACKAGE	5	formed 2 3/8" OD x 10 GA & 1.315" OD x 12 GA galvanized steel tubing, and 7 GA stainless steel sheet. Finished with a baked on powder coating.
036-0815	HARDWARE PACKAGE	2 2	
036-1013	HARDWARE PACKAGE	2	SPINNER, MIDDLE SECTION, FIERCE CYCLONE: One piece all welded
046-0378	BEARING, 2 BOLT FLANGE,	1	construction consisting of formed 1.660" OD x 12 GA & 1.315" OD x 12 GA galvanized steel tubing, 3 1/2" OD x 3/8" wall DOM steel tubing and 1/4" HR
	NARROW		steel plate. Finished with a baked on powder coating.
049-1211	CYCLONE SPINNER ANCHOR ASSEMBLY	1	HARDWARE PACKAGE: Stainless steel.
			HARDWARE PACKAGE: Stainless Steel.
			HARDWARE PACKAGE: Stainless steel button head cap screws, washers, & barrel nuts .
			BEARING. 2 BOLT FLANGE. NARROW: PBT Thermoplastic housing, Zinc coated insert, sealed bearing
			<u>CYCLONE SPINNER ANCHOR ASSEMBLY</u> : Assembly consisting of an anchor weldment, rubber boot, malleable iron universal joint, bearings, stainless steel set screws and CF steel shaft.
Note: Hardware package(s) may include extra hardware that is not necessary for this installation.			SHIPPING WEIGHT: 150 LBS.

- 1. Dig footing holes per dimensions shown. See typical concrete footing details for 2 3/8" tubing which are located in the preface of your installation manual.
- 2. Attach STANDING SPINNER ARCHED BEAM to posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL C.
- Remove steel plug from side of 2 BOLT FLANGE BEARING and insert 1/4" X 45° GREASE ZERK to 2 bolt flange bearing. See EXPLODED VIEW B. Add grease as necessary.

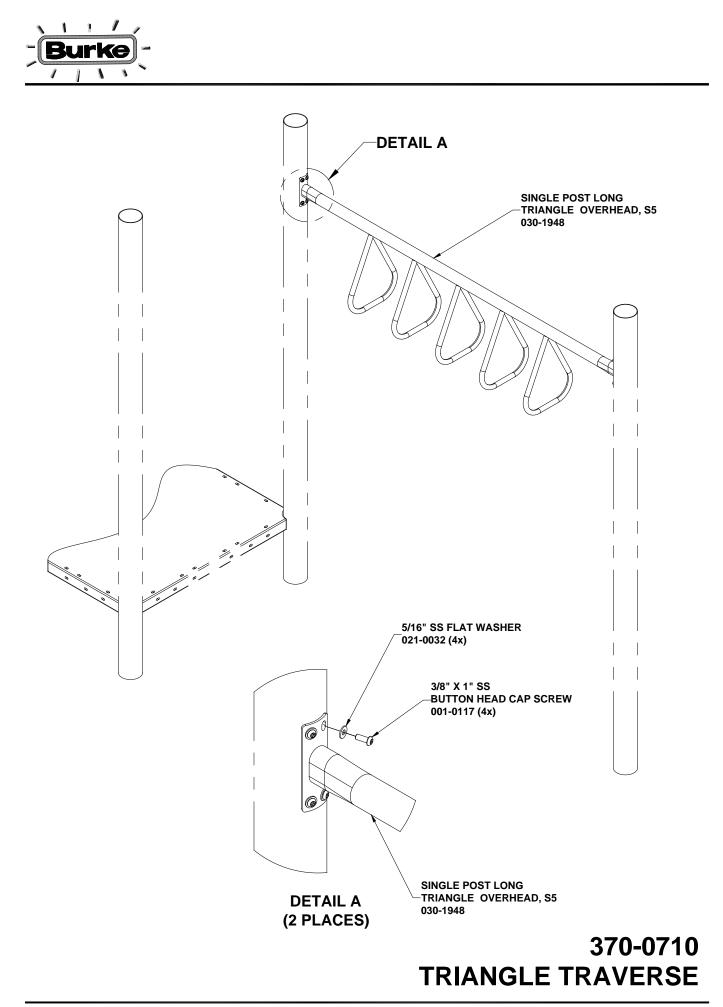
NOTE: Grease zerk is provided so that the Flange Bearing on the Spinner Shaft can be lubricated during periodic maintenance. 1. Remove set screw from hub.

- 2. Screw in grease zerk.
- 3. Insert general purpose grease into grease zerk from hand grease gun.
- 4. Remove grease zerk and re-insert set screw flush with bearing hub surface.

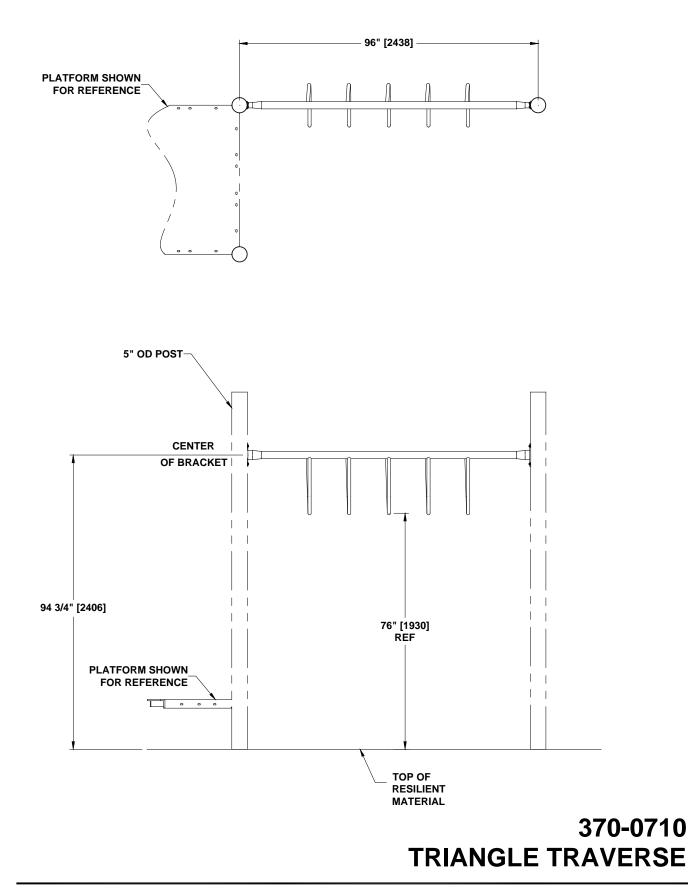
NOTE: Keep grease zerk in a safe place and save for next maintenance period.

- 4. Attach 2 bolt flange bearing to ARCHED BEAM using 3/8" x 1" SS button head cap screws. Tighten hardware. See EXPLODED VIEW B.
- 5. Attach SPINNER MIDDLE SECTION to the CYCLONE SPINNER ANCHOR ASSEMBLY with all the parts in-between. Tighten hardware. See EXPLODED VIEW A.
- 6. Put Anchor section of Spinner Middle Section assembly into the footing hole. Push assembly up so shaft of Spinner Middle Section goes into the Flange Bearing on the Arched Beam. Ensure that there is 1" to 2" of space between Arched Beam and to bar of the Spinner Middle Section. See EXPLODED VIEW B & SIDE VIEW.
- 7. Block up Spinner Middle Section assembly. Ensure there is a 10 degree offset. Tighten set screws. See EXPLODED VIEW B & SIDE VIEW.
- 8. Pour concrete and allow concrete to set for 2-3 days.
- 9. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

370-0576.doc Description: SPINNER, FIERCE CYCLONE REV: 04 PCN: 16-0288 12/29/2016



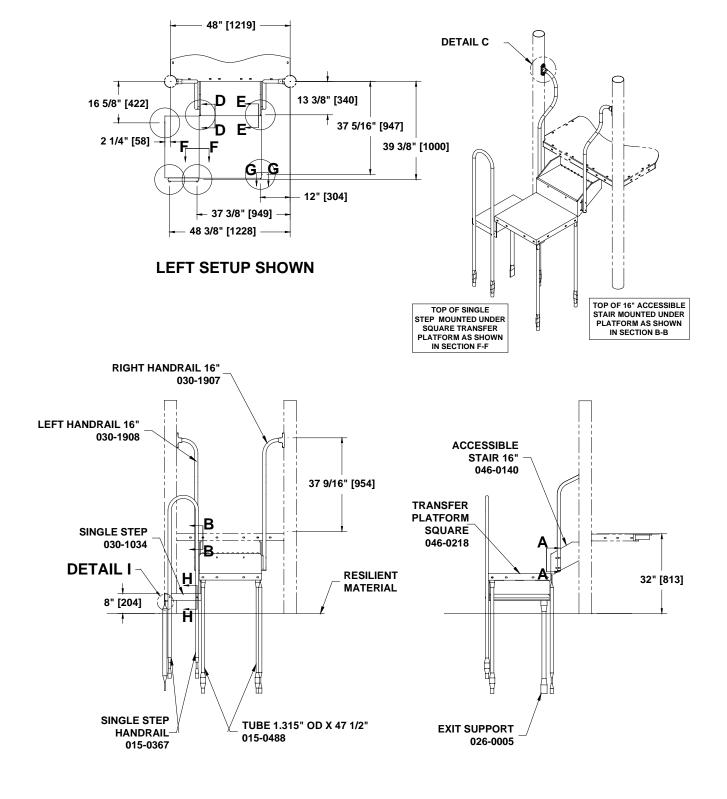




PARTS LIST				
PART NO.	DESCRIPTION	<u>QTY</u>	SINGLE	POST LONG TRIANGLE OVERHEAD, S5: One
030-1948	SINGLE POST LONG TRIANGLE	1	piece all	welded construction consisting of 2.375" x 12 GA,
036-0258	OVERHEAD, S5 HARDWARE PACKAGE	4		D X 14 GA galvanized steel tubing & 7 GA Stainless eet. Finished with a baked on powder coating.
			HARDW	ARE PACKAGE: Stainless steel.
				ALL PACINGE. Glaimess stort.
Note: Hardware package(s) may include extra hardware				
that is not necessary for this installation.		SHIPPING WEIGHT: 41 LBS.		

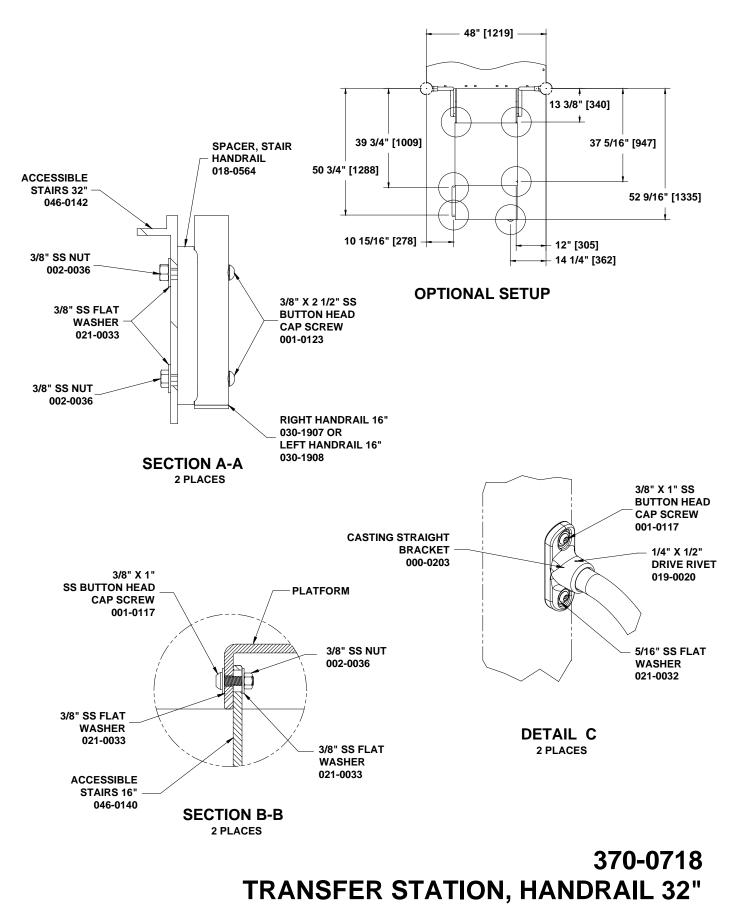
- 1. Attach SINGLE POST LONG TRIANGLE OVERHEAD, S5to posts using 3/8" x 1" SS button head cap screw and 5/16" SS flat washer. See DETAIL A.
- 2. Plumb and level components. Tighten all hardware.
- 3. Pour concrete and let set 2-3 days.
- 4. INSTALL RESILIENT SURFACING MATERIAL IN ACCORDANCE TO INSTALLATION GUIDELINES.

# 370-0718 TRANSFER STATION, HANDRAIL 32"



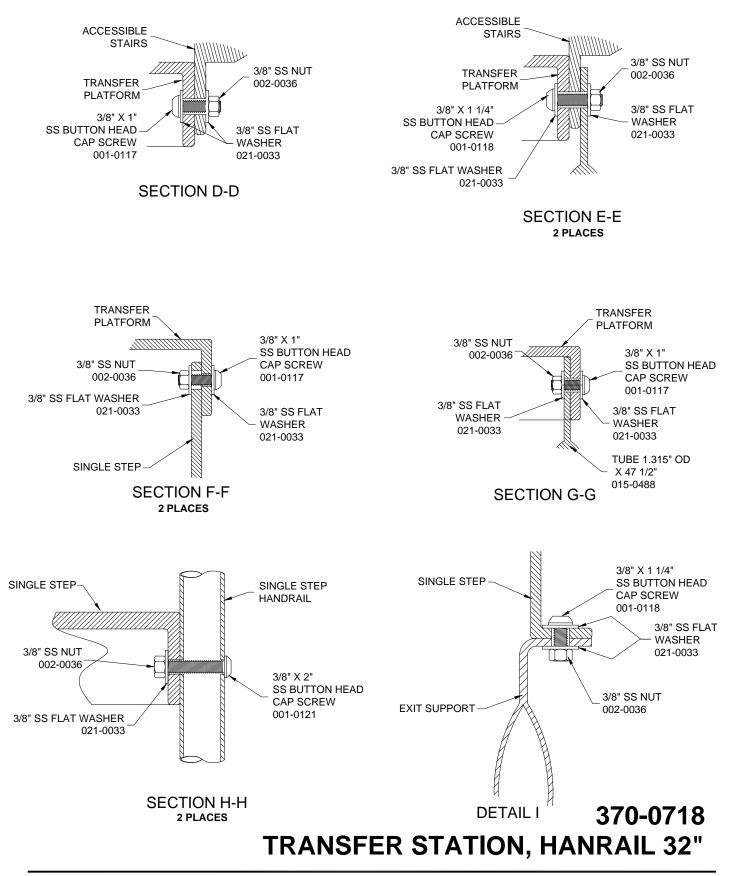






#### BCI Burke Company, LLC P.O. Box 549 Fond du Lac, Wisconsin 54936-0549





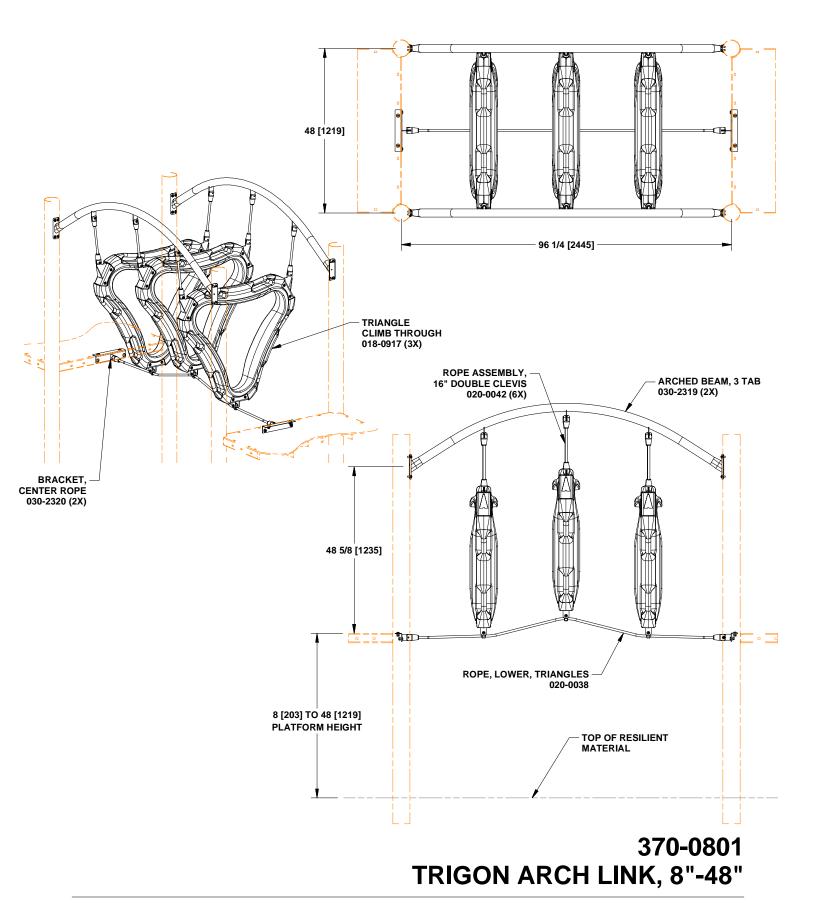
	PARTS LIST	1	SPECIFICATIONS	<u> </u>			
PART NO. 000-0203	DESCRIPTION CASTING, STRAIGHT BRACKET	<u>QTY</u> 2	<u>CASTING, STRAIGHT BRACKET</u> : A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.				
015-0367 015-0488 018-0564	SINGLE STEP HANDRAIL TUBE 1.315" OD X 47 1/2" SPACER, STAIR HANDRAIL	1 3 2	SINGLE STEP HANDRAIL: Formed 1.315" OD x 12 GA galvanized steel tubing finished with a baked on powder coating.	t			
026-0005 030-1034	SUPPORT, EXIT, 37.29" SINGLE STEP	1	TUBE 1.315" OD X 47 $1/2$ ": 1.315" OD x 12 GA galvanized steel tubing finished with a baked on powder coating.				
030-1907 030-1908	RIGHT HANDRAIL 16" LEFT HANDRAIL 16"	1	SPACER, STAIR HANDRAIL: 3/4" extruded HDPE.				
036-1123 046-0140 046-0218	HARDWARE PACKAGE 16" ACCESSIBLE STAIRS SQUARE TRANSFER PLATFORM	1 1 1	SUPPORT, EXIT, 37.29": 1.660" OD x 13 GA galvanized steel tubin finished with a baked on powder coating.	ng			
			SINGLE STEP: One piece all welded construction consisting of 12 GA surfaces and gussets. PVC coated after fabrication.				
			<u>RIGHT HANDRAIL 16"; LEFT HANDRAIL 16"</u> : Formed 1.315" OD 2 12 GA galvanized steel tubing finished with a baked on powder coating.	x			
			HARDWARE PACKAGE: Stainless steel screws, nuts & washers a aluminum rivets with 302 stainless steel pin.	nd			
			<u>16" ACCESSIBLE STAIRS</u> : One piece all welded construction consisting of 12 GA HRPO steel surfaces, sides, and gussets. PVC coated after fabrication.	С			
	vare package(s) may include extra hardw ecessary for this installation.	vare	SQUARE TRANSFER PLATFORM : One piece all welded construction consisting of 12 GA surfaces, gussets, and corners. PVC coated after fabrication. SHIPPING WEIGHT: 163 LBS.				
	INSTALLATION INSTRUCTIONS						
	NOTE: PVC coating may need to be removed from mounting holes of parts before installation.						
NOTE. FVC coating may need to be removed from mounting noies of parts before instanation.							

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

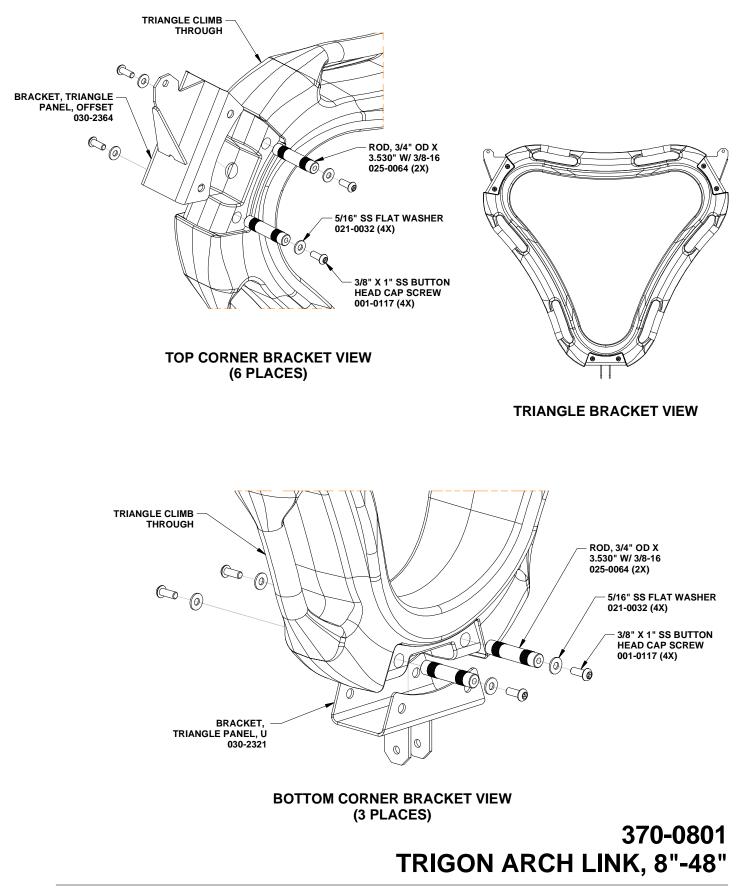
- 1. Install platforms. See appropriate installation instructions.
- 2. Dig footing holes per dimensions shown. See concrete footing drawing for 1.315" OD and 1.660" OD tubing, which is located in the preface of your installation manual.
- Attach TUBES and TRANSFER PLATFORM to 16" ACCESSIBLE STAIRS using 3/8" x 1 1/4" SS button head cap screws with tubes, 3/8" x 1" SS button head cap screws without tubes, 3/8" SS nuts and 3/8" SS flat washers. Refer to SECTION D-D and E-E.
- 4. Attach Tube to Transfer Platform using 3/8" x 1" SS button head cap screw, 3/8" SS nut and 3/8" SS flat washers. Refer to SECTION G-G.
- 5. Attach SINGLE STEP to TRANSFER PLATFORM using 3/8" x 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION F-F.
- Attach EXIT SUPPORT to Single Step using a 3/8" x 1 1/4" SS button head cap screw, 3/8" SS washers and a 3/8" SS nut. See SECTION H-H.
- Attach SINGLE STEP HANDRAIL to side of Single Step using 3/8" x 2" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See DETAIL I. Note: the heads of the button head cap screws must be on the outside of the step assembly.
- 8. Position transfer station assembly into footing holes. Attach Accessible Stair to platform using 3/8" x 1" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. Do not tighten nuts. See SECTION B-B.
- 9. Block-up and level transfer station assembly.
- 10. Attach CASTING STRIGHT BRACKETS to 5" OD posts using 3/8" X 1" SS button head cap screws and 5/16" SS washers. See DETAIL C.
- 11. Sleeve RIGHT AND LEFT HANDRAILS onto brackets. See DETAIL C.
- 12. Attach right and left handrails to Accessible Stairs using STAIR HANDRAIL SPACER, 3/8" x 2 1/2" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. Note: the head of the button head cap screw must be on the outside of the stair. See SECTION A-A.
- 13. Drill 1/4" diameter holes through pilot holes on handrails and into mount brackets. Insert drive rivets and drive flush with handrails. See DETAIL
- 14. Tighten all hardware.
- 15. Pour concrete and allow concrete to set for 2-3 days.
- 16. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

370-0718.doc Description: TRANSFER STATION, HANDRAIL 32" REV: 02 PCN: 14-0013 2/4/2014

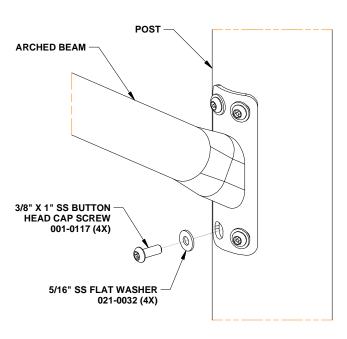






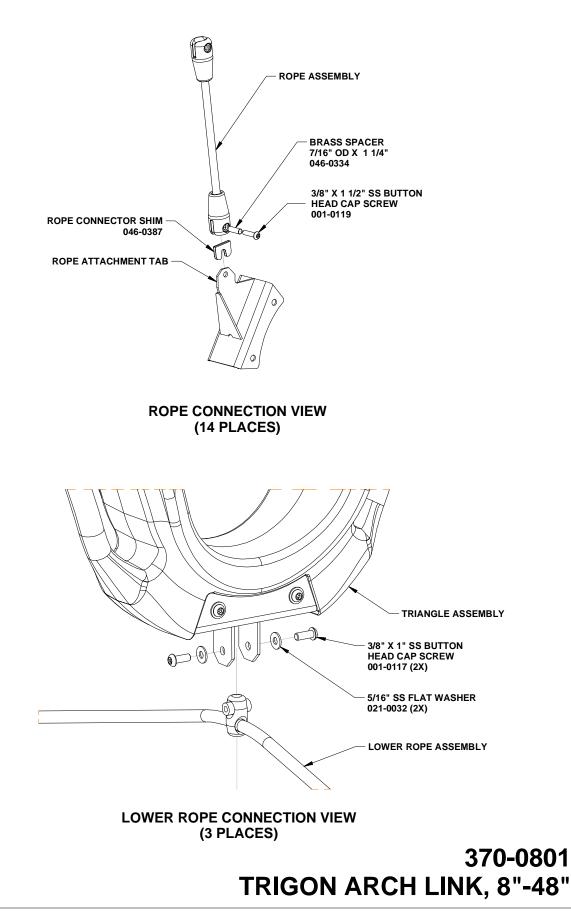


#### **ARCH TO POST VIEW** (4 PLACES) 3/8" X 1" SS BUTTON HEAD CAP SCREW 001-0117 (4X) BRACKET 3/8" SS FLAT WASHER 021-0033 (8X) O R 0 Ð PLATFORM R 0 Ø 6) O Ð ₹ Ø 0) Ô 6) 3/8" SS NUT O 002-0036 (4X) 0 Ø Ø PLATFORM BRACKET VIEW (2 PLACES) 370-0801 **TRIGON ARCH LINK, 8"-48"**









PART N	PARTS LIST           0.         DESCRIPTION         G	<u>YTY</u>				
018-0917	TRIANGLE CLIMB THROUGH	3				
	ROPE, LOWER, TRIANGLES	1				
020-0042	ROPE ASSEMBLY, 16" DOUBLE CLEVIS	6				
	ROD, 3/4" OD X 3.530" W/ 3/8-16	18				
	ARCHED BEAM, 3 TAB	2				
	BRACKET, CENTER ROPE	2				
030-2321	BRACKET, TRIANGLE PANEL, U	3				
030-2364	BRACKET, TRIANGLE PANEL, OFFSET	6				
036-1402	HARDWARE PACKAGE	1				
046-0334 BRASS SPACER 7/16" OD X 1 1/4" 14						
<b><u>NOTE</u></b> : Hardware package(s) may include extra hardware that is not necessary for this installation.						

#### **SPECIFICATIONS**

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, LOWER, TRIANGLES</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 end connectors and ferrules with stainless steel threaded rods and screws.

<u>ROPE ASSEMBLY, 16" DOUBLE CLEVIS</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 end connectors and ferrules.

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

ARCHED BEAM, 3 TAB: 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.

BRACKET, CENTER ROPE; BRACKET, TRIANGLE PANEL, U; BRACKET, TRIANGLE <u>PANEL, OFFSET</u>: One piece all welded construction consisting of 8 and 10 GA galvanized steel. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel hardware and black thermoplastic.

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

SHIPPING WEIGHT: 167 LBS.

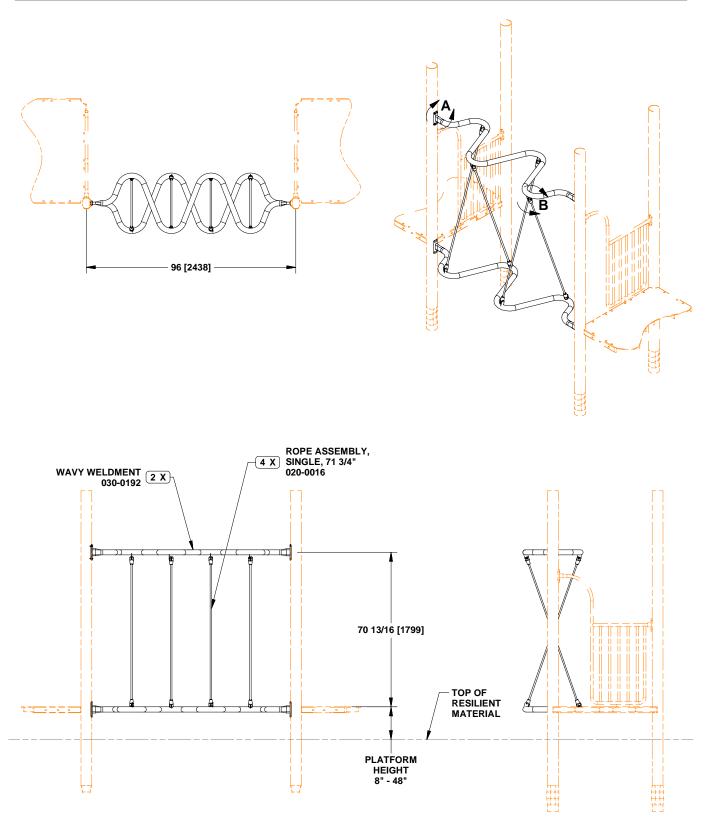
### INSTALLATION INSTRUCTIONS

# NOTE: PVC coating may need to be removed from mounting holes on platform before installing. NOTE: Do not tighten hardware until instructed to do so.

- 1. Press the RODS, 3/4" OD X 3.530" W/3/8-16 into the holes in the TRIANGLE CLIMB THROUGH as shown in TOP CORNER BRACKET VIEW. Press in until flush.
- 2. Install the BRACKET, TRIANGLE PANEL, OFFSET onto the TRIANGLE CLIMB THROUGH using the hardware shown in TOP CORNER BRACKET VIEW. Reference TRIANGLE BRACKET VIEW for bracket orientation.
- 3. Install the BRACKET, TRIANGLE PANEL, U onto the TRIANGLE CLIMB THROUGH using the hardware shown in BOTTOM CORNER BRACKET VIEW. Reference TRIANGLE BRACKET VIEW for bracket orientation.
- 4. Tighten all hardware.
- 5. Install the ARCHED BEAM, 3 TAB to the posts using the hardware shown in ARCH TO POST VIEW. Tighten all hardware.
- 6. Attach the BRACKET, CENTER ROPE to platform using the hardware shown in PLATFORM BRACKET VIEW. Tighten all hardware.
- 7. Install ROPE ASSMEBLY, 16" DOUBLE CLEVIS to the OFFSET TRIANGLE BRACKETS using the hardware shown in ROPE CONNECTION VIEW.
- 8. Hang the rope and triangle assemblies from the arches by connecting the ropes to the tabs on the ARCHED BEAM using the hardware shown in ROPE CONNECTION VIEW.
- 9. Tighten all hardware
- 10. Attach ROPE, LOWER, TRIANGLES to the TRIANGLE U BRACKETS using the hardware shown in LOWER ROPE CONNECTION VIEW.
- 11. Attach LOWER ROPE to CENTER ROPE BRACKETS using hardware shown in ROPE CONNECTION VIEW.
- 12. Tighten all hardware.
- 13. Block up and plumb entire structure.
- 14. Pour Concrete. Allow concrete to set for 2-3 days.

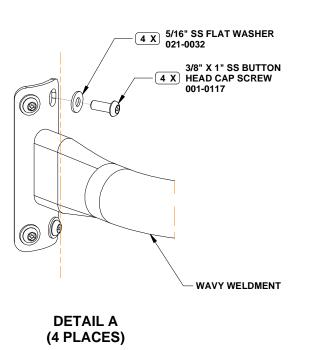
15. Install resilient surfacing material in accordance with installation guidelines, ASTM standards and CPSC guidelines.

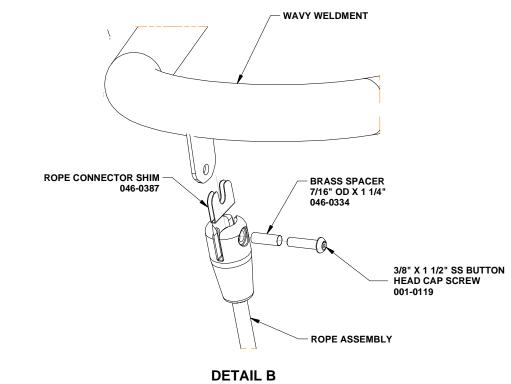




# 370-0808 TWISTING TRAVERSE







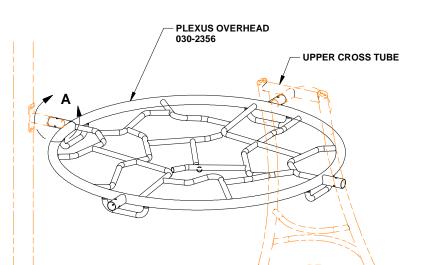
(8 PLACES)

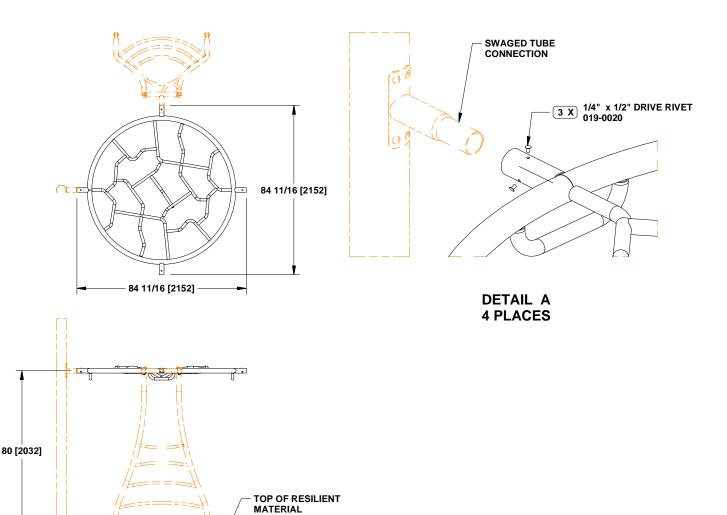
370-0808 TWISTING TRAVERSE

	PARTS LIST		SPECIFICATIONS
PART NO. 020-0016 030-0192 036-0818 036-1311 046-0334	ROPE ASSEMBLY, SINGLE, 71 3/4" WAVY WELDMENT INTENSITY SHIM PACKAGE HARDWARE PACKAGE BRASS SPACER 7/16" OD X 1 1/4"	QTY 4 2 2 3 8	ROPE ASSEMBLY, SINGLE, 71 3/4": 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 end connectors and ferrules with stainless steel screws.         WAVY WELDMENT: All welded constructions consiting of 2.375" OD x 12 GA galvanized steel tubing, 7 GA stainless steel sheet & 8 GA galanized steel sheet. Finished with a baked on powder coating.         INTENSITY SHIM PACKAGE: Black thermoplastic.         HARDWARE PACKAGE: Stainless steel.         BRASS SPACER 7/16" OD X 1 1/4": Brass Tube 7/16" OD X .028" Wall
	ardware package(s) may include extra ha necessary for this installation.	rdware	SHIPPING WEIGHT: 103 LBS.
		-	
NOTE: Do	not tighten hardware until instructed	l to do so.	

- 1. Locate mounting holes for WAVY WELDMENT on posts.
- 2. Attach wavy weldment to posts using hardware specified in DETAIL A.
- 3. Attach ROPE ASSEMBLY, SINGLE, 71 3/4" to wavy weldments using hardware specified in DETAIL B.
- 4. Tighten all hardware.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





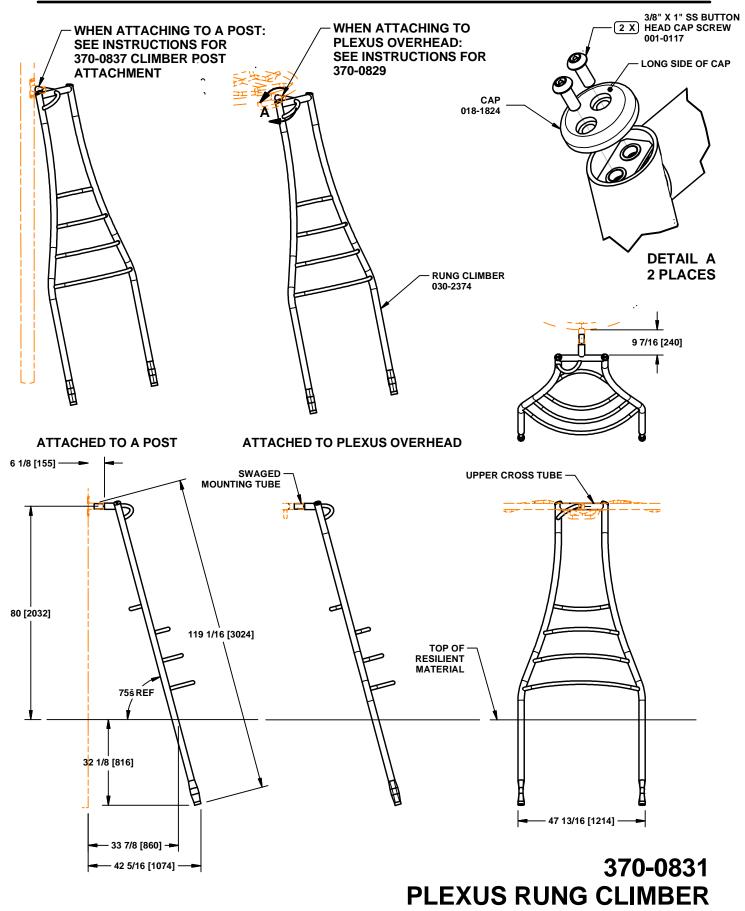




	]	
PARTS LIST		SPECIFICATIONS
PART NO. DESCRIPTION	QTY	PLEXUS OVERHEAD: One piece all welded construction
030-2356 PLEXUS OVERHEAD		consisting of
036-1184 HARDWARE PACKAGE	3	formed 2 3/8" OD x 12 GA & 1.315" OD x 14 GA galvanized
		steel tubing. Finished with a baked on powder coating.
		HARDWARE PACKAGE: Aluminum rivets with stainless
		steel pins.
NOTE: Hardware package(s) may include extra	a hardware	
that is not necessary for this installation.		SHIPPING WEIGHT: 96 LBS.

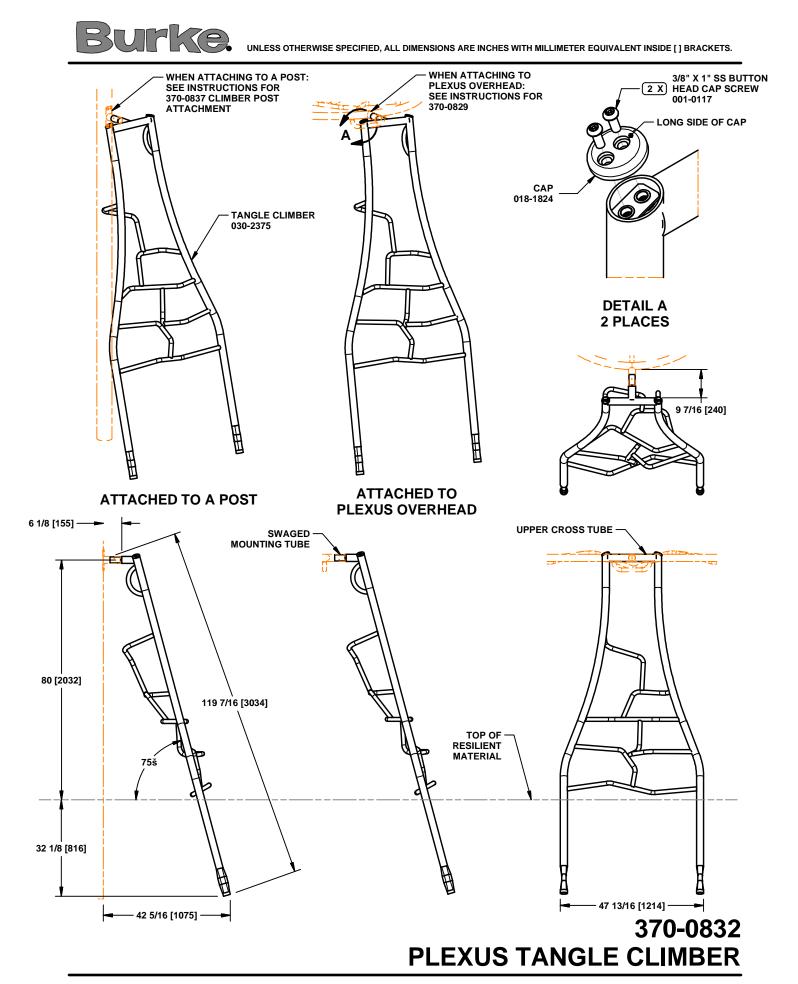
- 1. Determine location of Plexus Overhead and four attached components from site plan.
- Slide the swaged tube connection of the climbers or overhead post bracket into the tube connections of the PLEXUS OVERHEAD. See specific mating component installation instructions for attachment. Make sure the climbers are rotated on the swaged tube connection so that the sides of the climbers are perpendicular and the upper cross tube is horizontal. Make sure the overhead ring is level.
- 4. Once the overhead ring and all climbers or post attachments are in place, install rivets at each of the 4 connection points. Using the 3 holes in each of the 4 connection points of the overhead climber as a guide, drill 1/4" diameter holes through the inner tube. Insert 1/4" drive rivets and pound center pins flush to engage rivets. Apply touch up paint to exposed heads of rivets.
- 5. Pour concrete in footings for components attached to the overhead and let stand for 2 to 3 days.
- 6. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CAP: 3/4" Extruded HDPE
030-2374 036-0258	CAP RUNG CLIMBER HARDWARE PACKAGE	2 1 2	RUNG CLIMBER: Weldment consisting of formed 2.375" OD x 10 GA and 1.315" OD x 12 GA galvanized tubing, 12 GA galvanized steel plate and nut inserts. Finished with a baked on powder coat finish.         HARDWARE PACKAGE: Stainless steel
	rdware package(s) may inclue necessary for this installation.		SHIPPING WEIGHT: 83 LBS.

- 1. Determine location of climber from site plan and dig footing holes accordingly. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Attach CAP(s) to RUNG CLIMBER with hardware specified in DETAIL A. Make sure the long side of the cap is oriented correctly so that it is centered on the opening and completely covers the open tube. Tighten hardware.
- 3. Slide the upper swaged mounting tube of the rung climber into the tube connection of either the Climber Post Attachment bracket or the Plexus Overhead. See specific mating component installation instructions for attachment. Make sure the rung climber is rotated on the swaged tube connection so that the sides of the rung climber are perpendicular and the upper cross tube is horizontal.
- 4. Pour concrete. Let set for two to three days.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

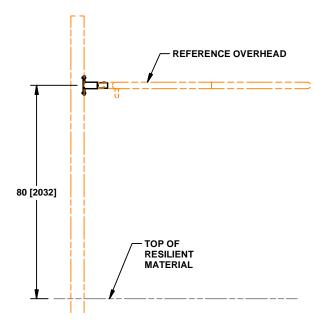


P.O. Box 549 Fond du Lac, WI 54936-0549

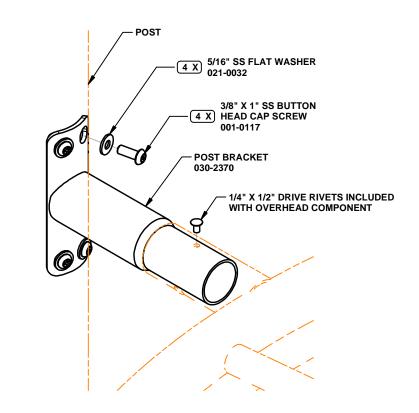
	💳 PARTS LIST 💳		SPECIFICATIONS
SARTNO		0.71/	
PART NO.	DESCRIPTION	<u>QTY</u>	CAP: 3/4" Extruded HDPE
018-1824 CA	λP	2	TANCLE CLIMPED: Woldmont consisting of formed 2 275" OD
030-2375 TA	ANGLE CLIMBER	1	TANGLE CLIMBER: Weldment consisting of formed 2.375" OD x 10 GA and 1.315" OD x 12 GA galvanized tubing, 12 GA
036-0258 HA	ARDWARE PACKAGE	2	galvanized steel plate and nut inserts. Finished with a baked on
			powder coat finish.
			HARDWARE PACKAGE: Stainless steel
NOTE: Hardv	ware package(s) may include e	extra hardware	
that is not nec	cessary for this installation.		SHIPPING WEIGHT: 89 LBS.

- 1. Determine location of climber from site plan and dig footing holes accordingly. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Attach CAP(s) to TANGLE CLIMBER with hardware specified in DETAIL A. Make sure the long side of the cap is oriented correctly so that it is centered on the opening and completely covers the open tube. Tighten hardware.
- 3. Slide the upper swaged mounting tube of the tangle climber into the tube connection of either the Climber Post Attachment bracket or the Plexus Overhead. See specific mating component installation instructions for attachment. Make sure the tangle climber is rotated on the swaged tube connection so that the sides of the tangle climber are perpendicular and the upper cross tube is horizontal.
- 4. Pour concrete. Let set for two to three days.
- 5. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.





**ELEVATION VIEW** 



**ASSEMBLY VIEW** 

### 370-0834 OVERHEAD POST ATTACHMENT

PARTS LIST	SPECIFICATIONS
PARTS LIST PART NO. DESCRIPTION 030-2370 POST BRACKET 036-0258 HARDWARE PACKAGE	SPECIFICATIONS         POST BRACKET: One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and formed 7 GA stainless steel plates. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel.
<u>NOTE:</u> Hardware package(s) may inc that is not necessary for this installation	SHIPPING WEIGHT: 3 LBS.

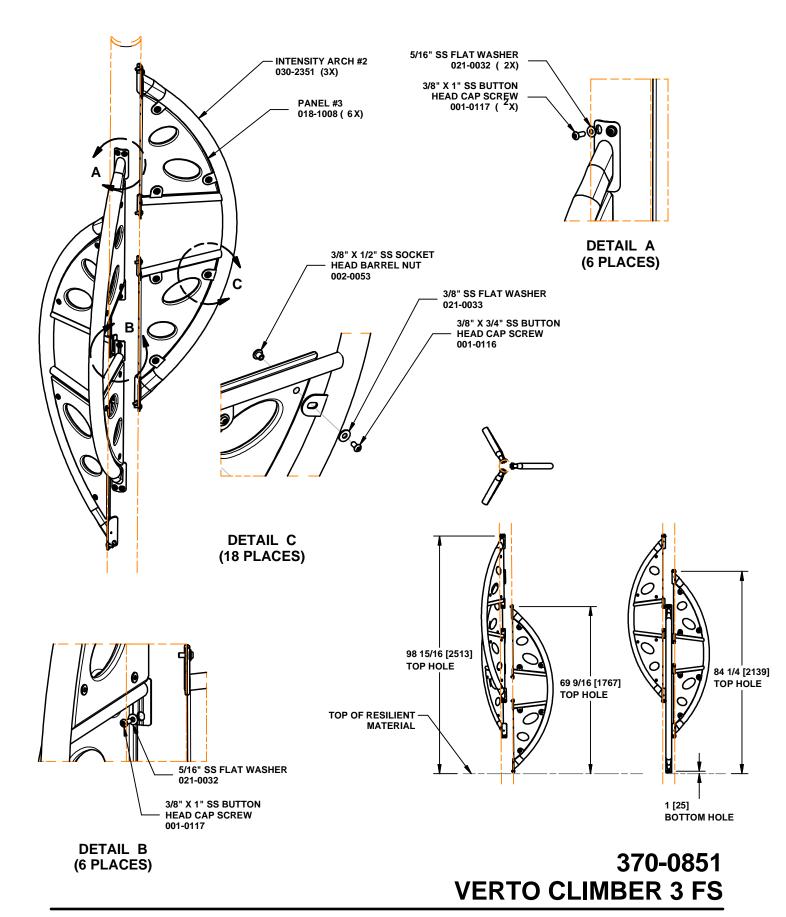
1. Determine location of Overhead Post Attachment from site plan.

2. Attach the POST BRACKET to the post with hardware specified in the assembly view. Slide the tube connection of the overhead onto the swaged portion of the post bracket. See specific overhead installation instructions for attachment. Make sure the overhead component lies on a level horizontal plane in relation to the post.

3. Using the 3 holes in the overhead attachment points as a guide, drill 1/4" diameter holes through the post bracket. Insert 1/4" drive rivets included with overhead component and pound center pins flush to engage rivets. Repeat at applicable remaining overhead attachments. Apply touch up paint to exposed heads of rivets.

4. Install resilient material in accordance with 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>	PANEL #3: 3/4" extruded HDPE.
018-1008         PANEL #3           030-2351         INTENSITY ARCH #2           036-0258         HARDWARE PACKAGE           036-1416         HARDWARE PACKAGE	6 3 3 3	INTENSITY ARCH #2: One piece all welded construction consisting of formed 2 3/8" OD x 10 GA & 1.315 OD x 12 GA galvanized steel tubing, formed 7 GA stainless steel plates, and 10 GA galvanized steel plate. Finished with a baked on powder coating. HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless steel.
<b><u>NOTE</u></b> : Hardware package(s) may include extra hardw that is not necessary for this installation.	vare	SHIPPING WEIGHT: 103 LBS.

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

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

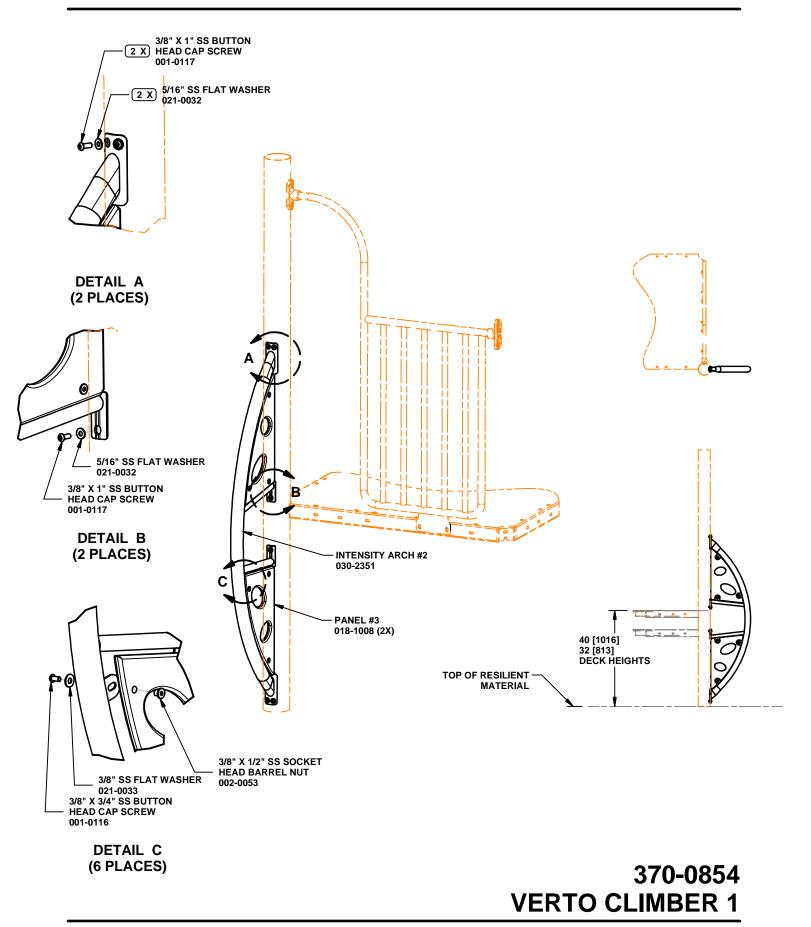
2. Attach INTENSITY ARCH #2 to post using hardware specified in DETAIL A and DETAIL B. Repeat for remaining arches.

3. Attach PANEL #3 to climbers using hardware specified in DETAIL C. Repeat for all panels.

4. Tighten all hardware.

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





Telephone 920-921-9220

PARTS LIST		SPECIFICATIONS
_PART NO	<u>I QTY</u>	PANEL #3: 3/4" extruded HDPE.
018-1008 PANEL #3 030-2351 INTENSITY ARCH #2 036-0258 HARDWARE PACKAGE 036-1416 HARDWARE PACKAGE		INTENSITY ARCH #2: One piece all welded construction consisting of formed 2 3/8" OD x 10 GA & 1.315 OD x 12 GA galvanized steel tubing, formed 7 GA stainless steel plates, and 10 GA galvanized steel plate. Finished with a baked on powder coating. HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless steel.
<b><u>NOTE</u>:</b> Hardware package(s) may inc that is not necessary for this installation		SHIPPING WEIGHT: 35 LBS.

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

1. Locate correct post to assemble arch to from site plan.

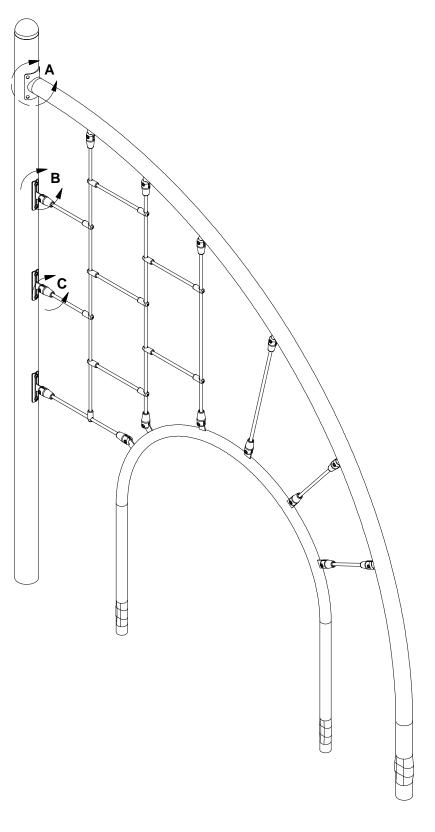
2. Attach INTENSITY ARCH #2 to post using hardware specified in DETAIL A and DETAIL B. Repeat for remaining arches.

3. Attach PANEL #3 to arch using hardware specified in DETAIL C. Repeat for all panels.

4. Tighten all hardware.

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

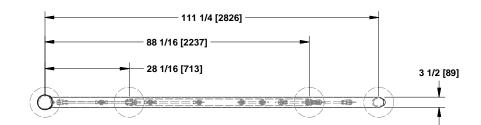


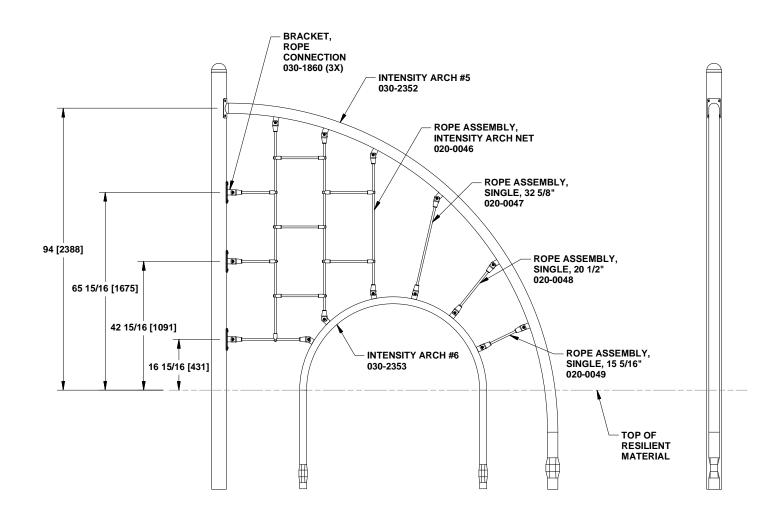


## 370-1583 APEX ROPE CLIMBER

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

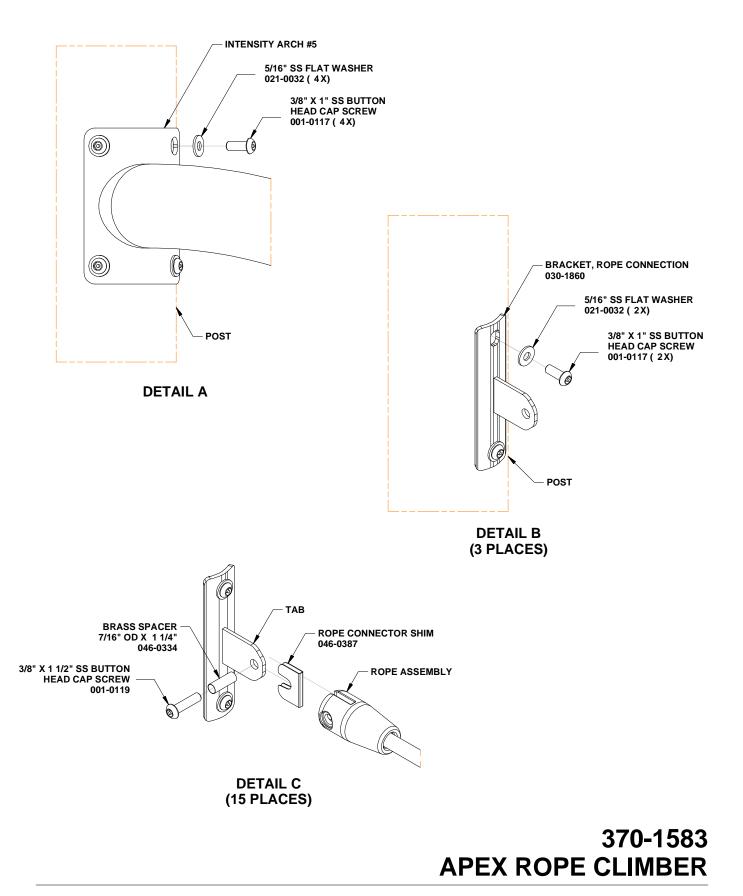






## 370-1583 APEX ROPE CLIMBER





	PARTS LIST		SPECIFICATIONS		
PART NO.	DESCRIPTION	<u>QTY</u>	ROPE ASSEMBLY, INTENSITY ARCH NET; ROPE ASSEMBLY, SINGLE		
020-0046	ROPE ASSEMBLY, INTENSITY ARCH NET	1	32 5/8"; ROPE ASSEMBLY, SINGLE, 20 1/2"; ROPE ASSEMBLY, SINGLE, 15 5/16": Rope consists of 6 right hand, regular lay strands, closed around a synthetic fiber core, with each preformed strand consistin		
020-0047	ROPE ASSEMBLY, SINGLE, 32 5/8"	1	of 8 galvanized steel wires tightly covered with multifilament polypropylene fibers. Aluminum end connectors and ferrules with stainless steel screws.		
020-0048	ROPE ASSEMBLY, SINGLE, 20 1/2"	1			
020-0049	ROPE ASSEMBLY, SINGLE, 15 5/16"	1	BRACKET, ROPE CONNECTION: One piece all welded construction		
030-1860	BRACKET, ROPE CONNECTION	3	consisting of a formed 3/16" stainless steel plate and a 8 GA galvanized steel sheet. Finished with a baked on powder coating.		
030-2352	INTENSITY ARCH #5	1	Sieer Sheek. Finished with a baked on powder coating.		
030-2353	INTENSITY ARCH #6	1	INTENSITY ARCH #5: One piece all welded construction consisting of		
036-1411	HARDWARE PACKAGE	1	formed 3 1/2" OD x 11 GA galvanized steel tubing, formed 7 GA stainless steel sheet and 8 GA		
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	15	galvanized steel plates. Finished with a baked on powder coating.		
			steel plates. Finished with a baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless steel hardware and black thermoplasti <u>BRASS SPACER 7/16" OD X 1 1/4"</u> : Brass tube 7/16" OD X .028" wall.		
	NOTE:       Hardware package(s) may include extra hardware that is not necessary for this installation.         SHIPPING WEIGHT: 150 LBS.				

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

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

2. Attach INTENSITY ARCH #5 to post using hardware specified in DETAIL A.

3. Attach BRACKET, ROPE CONNECTION to post using hardware specified in DETAIL B.

4. Attach ROPE ASSEMBLY, INTENSITY ARCH NET to INTENSITY ARCH #5 and BRACKET, ROPE CONNECTIONs using hardware specified in DETAIL C.

5. Attach ROPE ASSEMBLY, SINGLE, 32 5/8", ROPE ASSEMBLY, SINGLE, 20 1/2", and ROPE ASSEMBLY, SINGLE, 15 5/16" to INTENSITY ARCH #5 using hardware specified in DETAIL C.

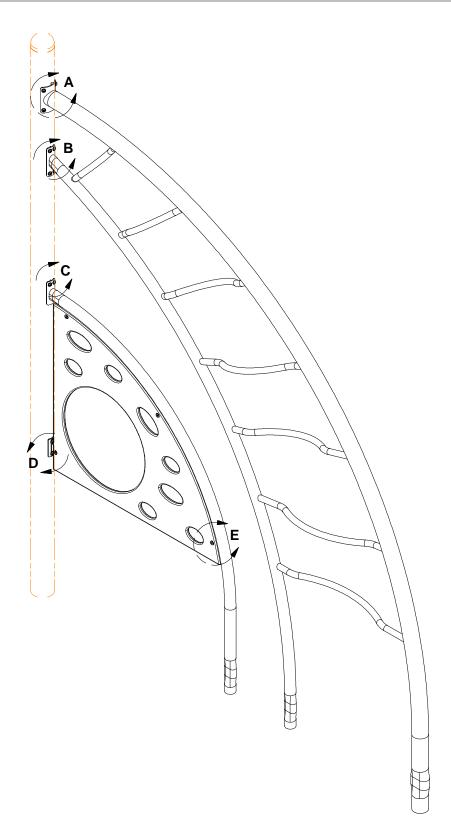
6. Attach INTENSITY ARCH #6 to ROPE ASSEMBLY, INTENSITY ARCH NET, ROPE ASSEMBLY, SINGLE, 32 5/8", ROPE ASSEMBLY, SINGLE, 20 1/2", and ROPE ASSEMBLY, SINGLE, 15 5/16" using hardware specified in DETAIL C. Note tab orientation on INTENSITY ARCH #6.

7. Tighten all hardware. Rope assemblies should be taut when assembly is complete.

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

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

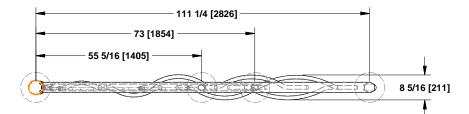


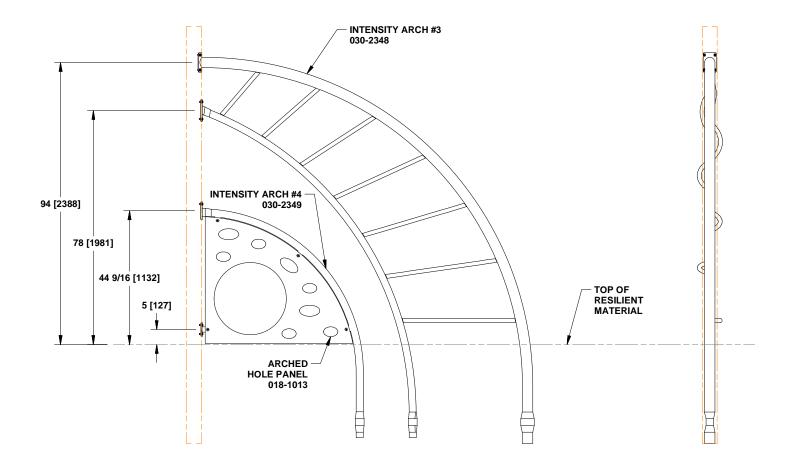


## 370-1584 APEX WAVE CLIMBER

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

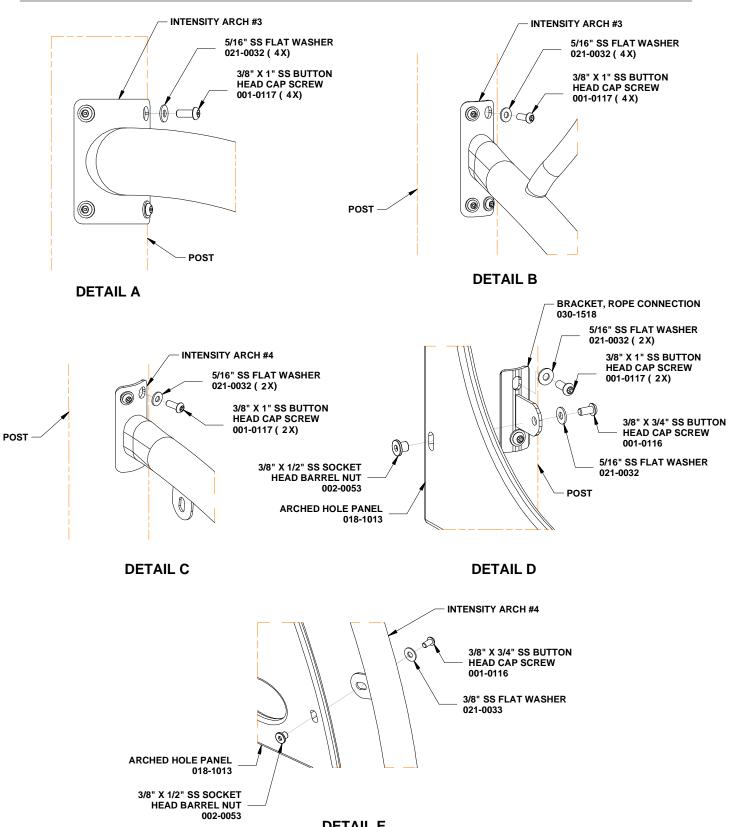






370-1584 APEX WAVE CLIMBER





DETAIL E (3 PLACES)

### 370-1584 APEX WAVE CLIMBER

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

	PARTS LIST		1 [	SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>		ARCHED HOLE PANEL: 3/4" extruded HDPE.
030-1518 BRA 030-2348 INTE 030-2349 INTE	CHED HOLE PANEL ACKET, ROPE CONNECTION ENSITY ARCH #3 ENSITY ARCH #4 RDWARE PACKAGE	1 1 1 1 1		<ul> <li><u>BRACKET, ROPE CONNECTION</u>: One piece all welded construction consisting of a formed 3/16" stainless steel plate and a 8 GA galvanized steel sheet. Finished with a baked on powder coating.</li> <li><u>INTENSITY ARCH #3</u>: One piece all welded construction consisting of formed 3 1/2" x 11 GA &amp; 2 3/8" OD x 10 GA galvanized steel tubing, formed 7 GA stainless steel plates, and formed 1.315" x 12 GA galvanized steel tubes. Finished with a baked on powder coating.</li> <li><u>INTENSITY ARCH #4</u>: One piece all welded construction consisting of formed 2 3/8" OD x 10 GA galvanized steel tubing, formed 7 GA stainless steel plate, and 10 GA galvanized steel plates. Finished with a baked on powder coating.</li> <li><u>HARDWARE PACKAGE</u>: Stainless steel and zinc plated steel.</li> </ul>
	are package(s) may include extra has sary for this installation.	ardware		SHIPPING WEIGHT: 184 LBS.

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

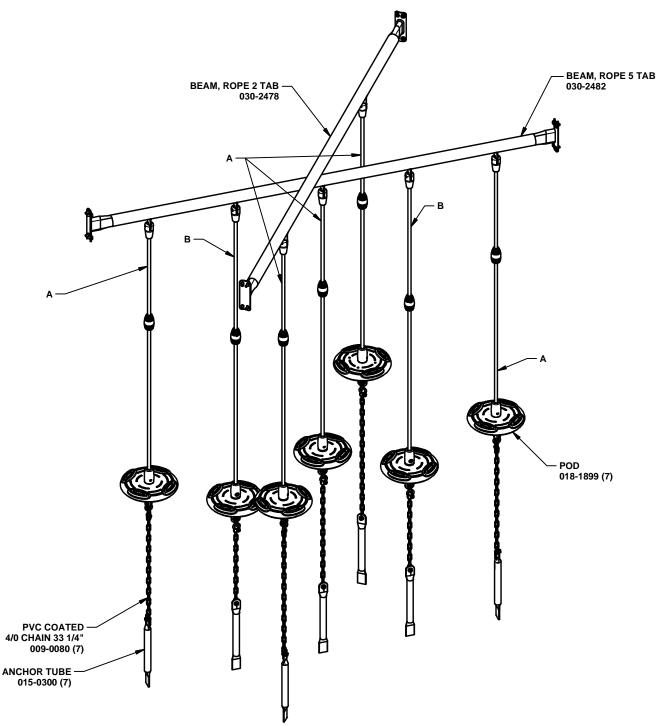
- 1. Locate and dig footing holes as per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Attach INTENSITY ARCH #3 to post using hardware specified in DETAIL A and DETAIL B.
- 3. Attach INTENSITY ARCH #4 to post using hardware specified in DETAIL C.
- 4. Attach BRACKET, ROPE CONNECTION to post using hardware specified in DETAIL D.
- 5. Attach ARCHED HOLE PANEL to arch and bracket using hardware specified in DETAIL D and DETAIL E.
- 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.

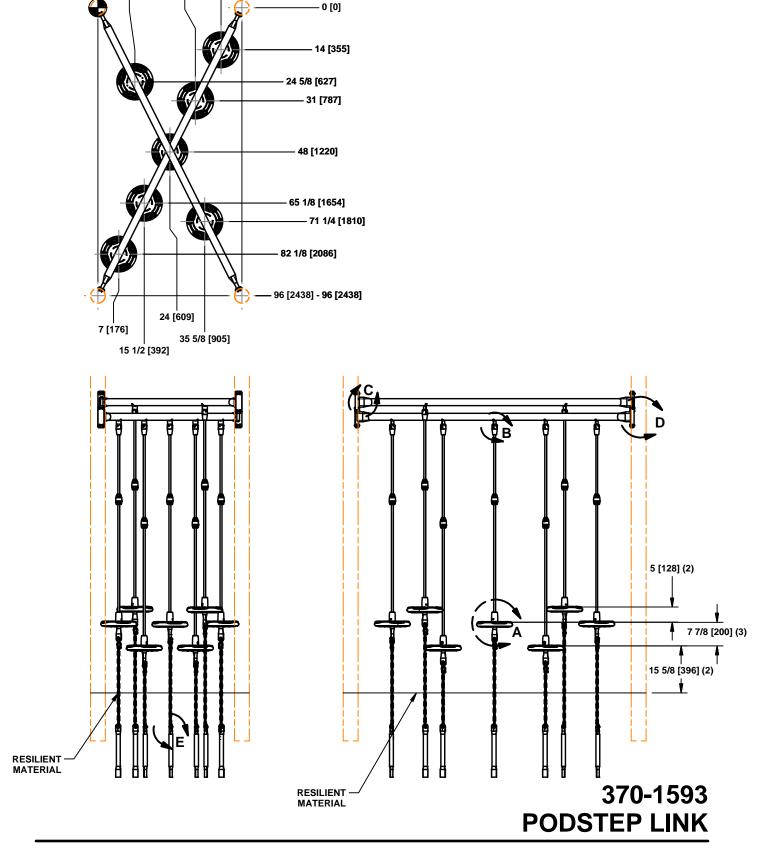


**ISO VIEW** 

ROPE NOTES: ROPE A - 020-0071 (5) ROPE ASSEMBLY, DISC TO TAB 64 1/8" ROPE B - 020-0084 (2) ROPE ASSEMBLY, DISC TO TAB 72 1/4"



### 370-1593 PODSTEP LINK





0 [0]

12 3/8 [313]

48 [1219]

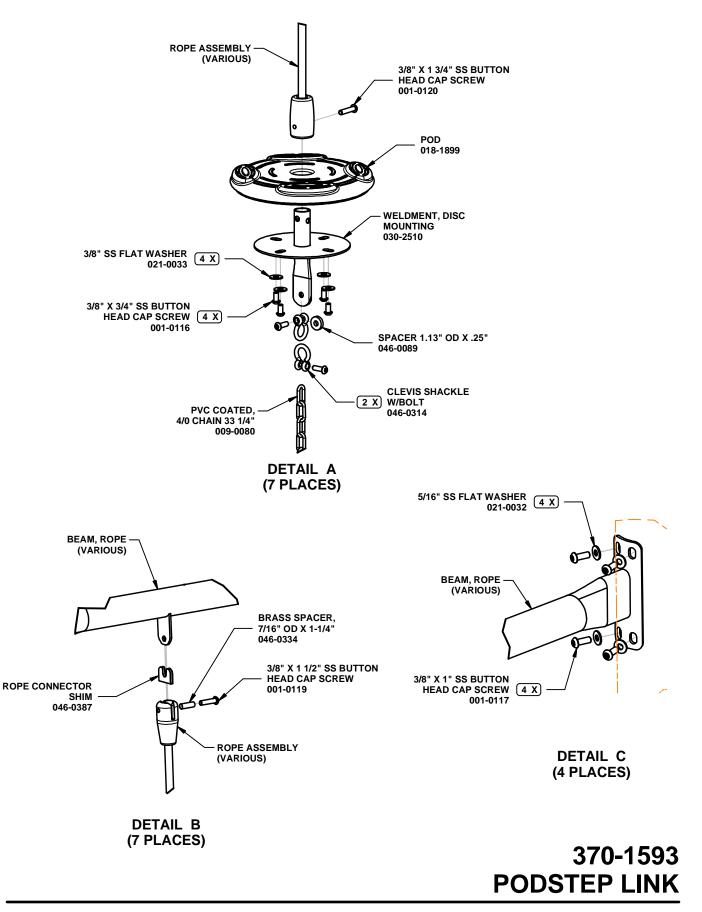
41 [1042]

32 1/2 [826]

**TOP VIEW** 

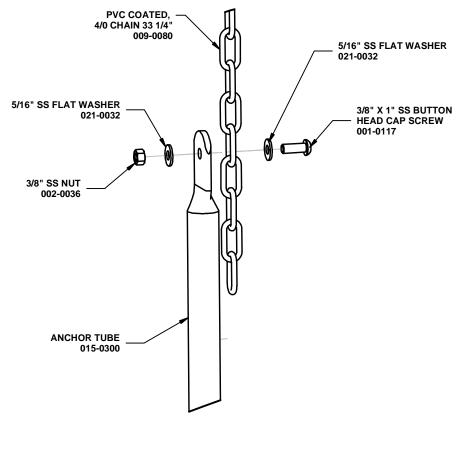
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE INCHES WITH MILLIMETER EQUIVALENT INSIDE [] BRACKETS.





Telephone 920-921-9220





DETAIL D (7 PLACES)



PVC COATED, 4/0 CHAIN 33 1/4": 3/8" diameter, 4/0 straight coil chain, PVC coated after fabrication.         ANCHOR TUBE: 1.315" OD x 12 GA galvanized steel tubing.         POD: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction.         ROPE ASSEMBLY, DISC TO TAB 72 1/4"; ROPE ASSEMBLY, DISC TO TAB 64 1/8". 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 polyester fibers. Aluminum grip, end connectors, and ferrules with stainless steel screws.         BEAM, ROPE 2 TAB; BEAM, ROPE 5 TAB: One piece all welded construction consisting of 2.375" OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel and black thermoplastic.         SPACER 1.13" OD X.25"; 1/4" Nylatron GS.
POD: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction.         ROPE ASSEMBLY, DISC TO TAB 72 1/4"; ROPE ASSEMBLY, DISC TO TAB 64 1/8"; 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 polyester fibers. Aluminum grip, end connectors, and ferrules with stainless steel screws.         BEAM, ROPE 2 TAB; BEAM, ROPE 5 TAB; One piece all welded construction consisting of 2.375" OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel and black thermoplastic.
POD: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction.         ROPE ASSEMBLY, DISC TO TAB 72 1/4"; ROPE ASSEMBLY, DISC TO TAB 64 1/8"; 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 polyester fibers. Aluminum grip, end connectors, and ferrules with stainless steel screws.         BEAM, ROPE 2 TAB; BEAM, ROPE 5 TAB; One piece all welded construction consisting of 2.375" OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel and black thermoplastic.
wall construction.         ROPE ASSEMBLY, DISC TO TAB 72 1/4"; ROPE ASSEMBLY, DISC TO TAB 64 1/8"; 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 polyester fibers. Aluminum grip, end connectors, and ferrules with stainless steel screws.         BEAM, ROPE 2 TAB; BEAM, ROPE 5 TAB; One piece all welded construction consisting of 2.375" OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel and black thermoplastic.
ROPE ASSEMBLY, DISC TO TAB 72 1/4"; ROPE ASSEMBLY, DISC TO TAB 64 1/8"; 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 polyester fibers. Aluminum grip, end connectors, and ferrules with stainless steel screws.         BEAM, ROPE 2 TAB; BEAM, ROPE 5 TAB; One piece all welded construction consisting of 2.375" OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel and black thermoplastic.
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 polyester fibers. Aluminum grip, end connectors, and ferrules with stainless steel screws.         BEAM, ROPE 2 TAB; BEAM, ROPE 5 TAB: One piece all welded construction consisting of 2.375" OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel and black thermoplastic.
preformed strand consisting of 8 galvanized steel wires tightly covered with polyester fibers. Aluminum grip, end connectors, and ferrules with stainless steel screws. <u>BEAM, ROPE 2 TAB: BEAM, ROPE 5 TAB</u> : One piece all welded construction consisting of 2.375° OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating. <u>HARDWARE PACKAGE</u> : Stainless steel and black thermoplastic.
Aluminum grip, end connectors, and ferrules with stainless steel screws.         BEAM, ROPE 2 TAB; BEAM, ROPE 5 TAB: One piece all welded construction consisting of 2.375° OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel and black thermoplastic.
BEAM, ROPE 2 TAB; BEAM, ROPE 5 TAB: One piece all welded construction consisting of 2.375" OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel and black thermoplastic.
2.375" OD x 10 GA galvanized steel tubing, 8 GA mounting brackets. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel and black thermoplastic.
powder coating. <u>HARDWARE PACKAGE</u> : Stainless steel and black thermoplastic.
HARDWARE PACKAGE: Stainless steel and black thermoplastic.
SPACER 1 13" OD X 25": 1//" Nulatrop GS
CLEVIS SHACKLE W/BOLT: 5/16" Shackle with a 3/8" X 1 1/2" bolt. BRASS SPACER 7/16" OD X 1 1/4": Brass Tube 7/16" OD X .028" Wall. SHIPPING WEIGHT: 152 LBS.

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

1. Dig footing holes per dimensions shown in the top view. See typical concrete footing details, which are located in the preface of your installation manual.

2. Attach BEAM, ROPE 2 TAB to 5" OD POST using HARDWARE as shown in DETAIL C.

3. Attach BEAM, ROPE 5 TAB to 5" OD POST using HARDWARE as shown in DETAIL C.

4. Attach POD to WELDMENT, DISC MOUNTING and ROPE ASSEMBLY, DISC TO TAB 72 1/4", or ROPE ASSEMBLY, DISC TO TAB 64 1/8" using HARDWARE as shown in DETAIL A.

5. Attach WELDMENT, DISC MOUNTING to PVC COATED, 4/0 CHAIN 33 1/4" with two CLEVIS SHACKLES W/BOLT and SPACER 1.13" OD X .25" as shown in DETAIL A.

6. Partially remove each bolt from CLEVIS SHACKLE W/BOLT, apply Loctite to threads and tighten bolt.

7. Attach PVC COATED, 4/0 CHAIN 33 1/4" to ANCHOR TUBE using HARDWARE as shown in DETAIL D.

8. Attach ROPE ASSEMBLY, DISC TO TAB 64 1/8" and ROPE ASSEMBLY, DISC TO TAB 72 1/4" to BEAM, ROPE 2 TAB and BEAM, ROPE 5 TAB using HARDWARE as shown in DETAIL B and ISO VIEW.

9. Block-up, level and plumb component.

10. Tighten all hardware.

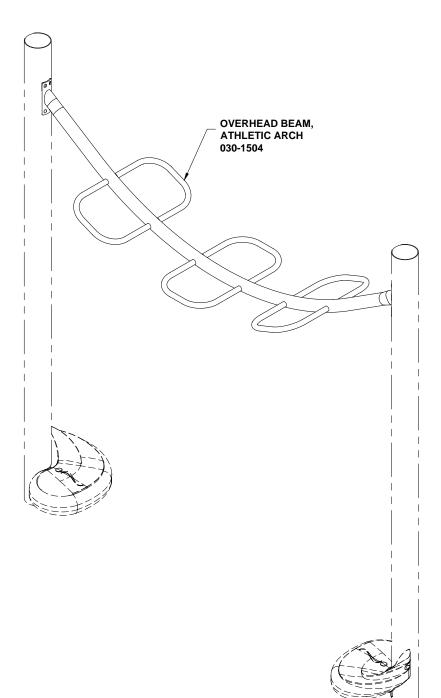
11. Pour concrete. Let set for two to three days.

12. **MAKE SURE ROPES ARE TAUT**. If some are not taut, remove bolts from ANCHOR TUBE as shown in DETAIL D and put it through the next higher link. Tighten the bolts again.

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

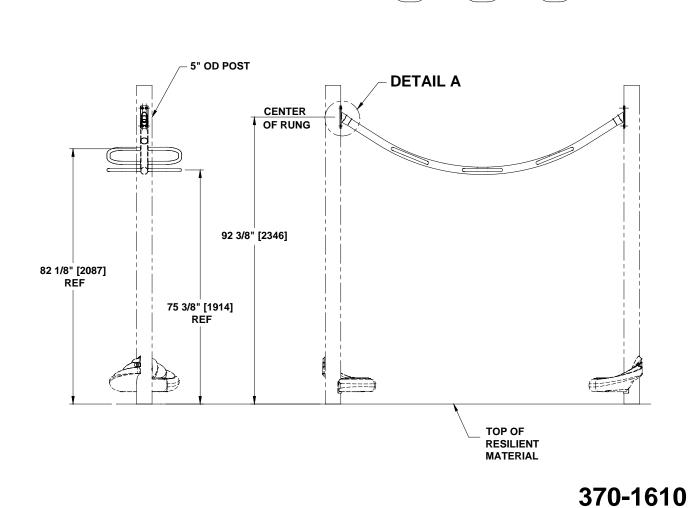
370-1593 PODSTEP LINK REV: 00 PCN: 15-0133 8/15/2016

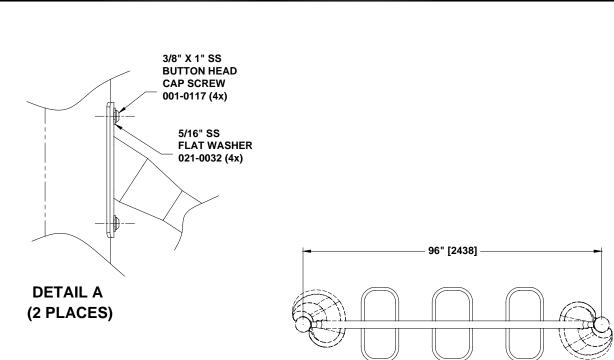




# 370-1610 ATHLETIC ARCH OH

**ATHLETIC ARCH OH** 



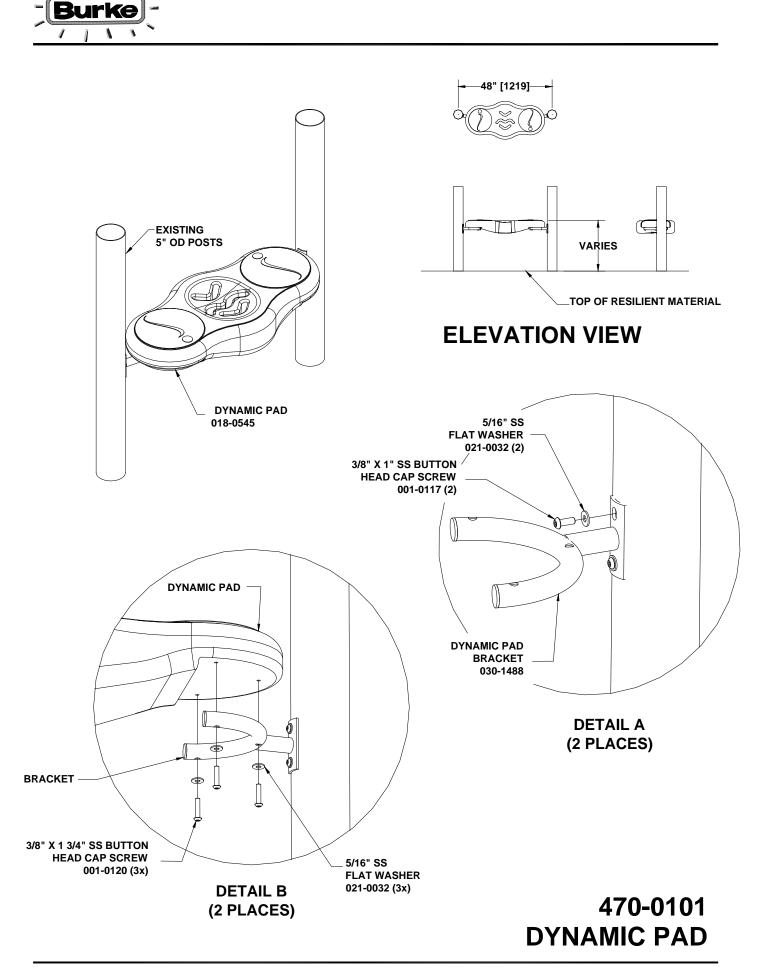




	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	OVERHEAD BEAM, ATHLETIC ARCH: One piece all welded
030-1504	OVERHEAD BEAM, ATHLETIC ARCH	1	construction consisting of 2 3/8" OD x 10 GA & 1.029" OD x 14 GA galvanized steel tubing, and 7 GA galvanized steel
036-0258	HARDWARE PACKAGE	4	plate. Finished with a baked on powder coating.
			HARDWARE PACKAGE: Stainless steel.
	ware package(s) may include extra har ecessary for this installation.	dware	SHIPPING WEIGHT: 46 LBS.

- Attach ATHLETIC ARCH OVERHEAD BEAM to posts using 3/8" x 1" SS button head cap screw and 5/16" SS flat washer. See DETAIL A.
- 2. Plumb and level components. Tighten all hardware.
- 3. Pour concrete and let set 2-3 days.
- 4. INSTALL RESILIENT SURFACING MATERIAL IN ACCORDANCE TO INSTALLATION GUIDELINES.

370-1610.doc Description: ATHLETIC ARCH OH REV: 00 PCN: 16-0193 9/1/2016



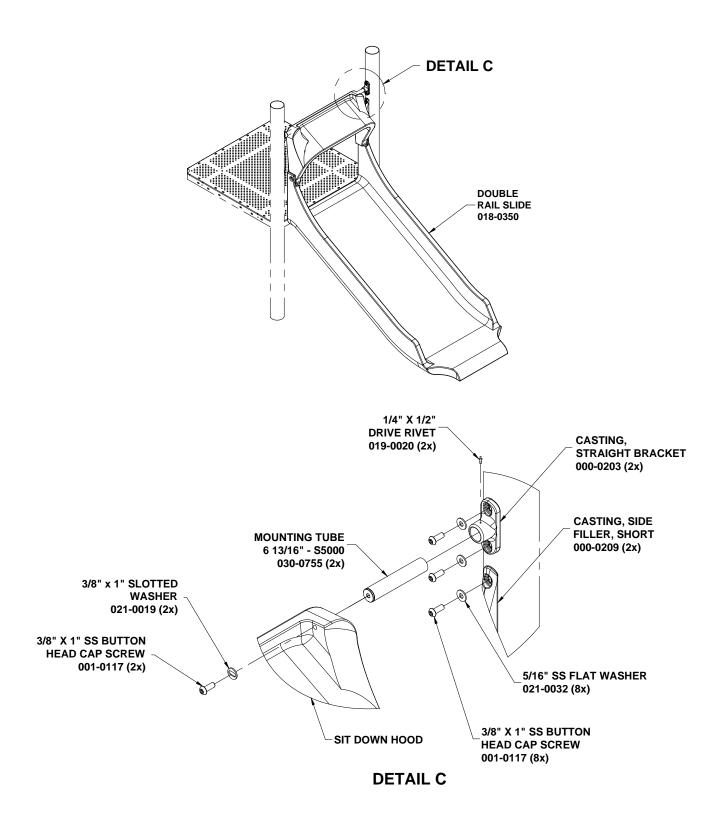
018-0545       DYNAMIC PAD       1         030-1488       BRACKET, DYNAMIC PAD       2         036-1425       HARDWARE PACKAGE       1         BRACKET, DYNAMIC PAD       2         036-1425       HARDWARE PACKAGE       1         BRACKET, DYNAMIC PAD       2         Surface.       BRACKET, DYNAMIC PAD: One piece all welded construction consisting of 10 GA galvanized sheet steel, 7 GA stainless steel sheet and formed 1.315° OD x 14 GA galvanized steel tubing. Finished with a baked on powder coating.         HARDWARE PACKAGE       HARDWARE PACKAGE: Stainless steel		— PARTS LIST —		SPECIFICATIONS			
Note: Hardware package(s) may include extra hardware that is not necessary for this installation.       construction consisting of 10 GA galvanized sheet steel, 7 GA stainless steel sheet and formed 1.315° OD x 14 GA galvanized steel tubing. Finished with a baked on powder coating.         HARDWARE PACKAGE: Stainless steel	018-0545 030-1488	DYNAMIC PAD BRACKET, DYNAMIC PAD		molded, U.V. stabilized polyethylene with double wall construction, molded in 3/8" T-nut inserts and a textured			
Note: Hardware package(s) may include extra hardware that is not necessary for this installation.				construction consisting of 10 GA galvanized sheet steel, 7 GA stainless steel sheet and formed 1.315" OD x 14 GA galvanized steel tubing. Finished with a baked on powder			
that is not necessary for this installation. SHIPPING WEIGHT: 27 LBS.				HARDWARE PACKAGE: Stainless steel			
that is not necessary for this installation. SHIPPING WEIGHT: 27 LBS.							
that is not necessary for this installation. SHIPPING WEIGHT: 27 LBS.							
that is not necessary for this installation. SHIPPING WEIGHT: 27 LBS.							
that is not necessary for this installation. SHIPPING WEIGHT: 27 LBS.							
			ktra hardware	SHIPPING WEIGHT: 27 LBS.			
		INSTALLATION INSTRUCTIONS					

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

- 1. Attach DYNAMIC PAD to DYNAMIC PAD BRACKET using 3/8" X 1 3/4" SS button head cap screws and 5/16" SS flat washers. See DETAIL B.
- 2. Attach DYNAMIC PAD BRACKETS to 5" posts using 3/8" X 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- 4. Block-up and level.
- 5. Tighten all hardware.
- 6. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

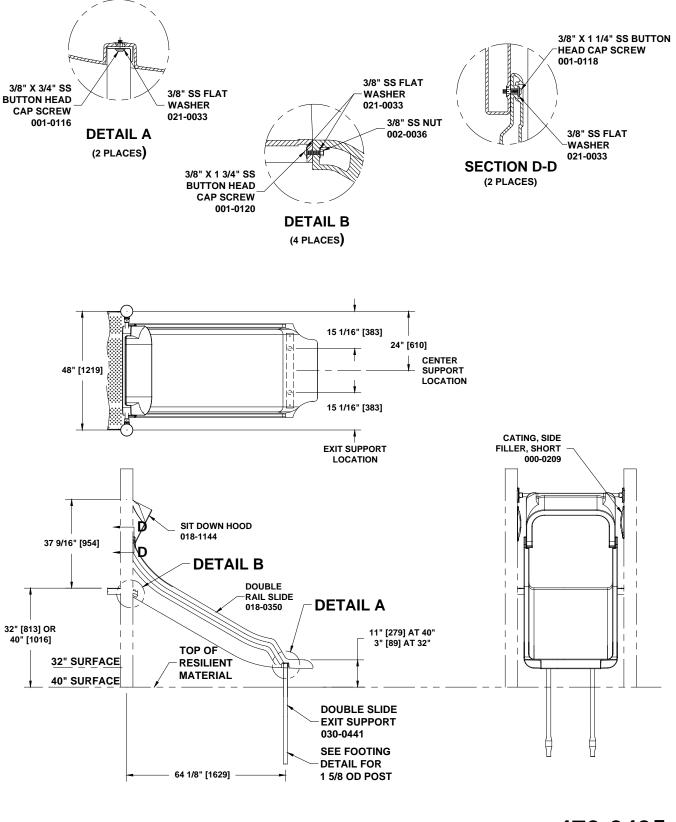
470-0101.doc Description: DYNAMIC PAD REV: 01 PCN: 15-0016 1/28/2015





# 470-0435 DOUBLE RAIL SLIDE 32"-40"





## 470-0435 DOUBLE RAIL SLIDE 32"-40"

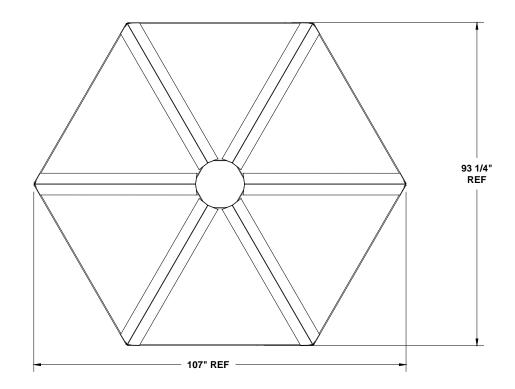
	PARTS LIST		ſ	SPECIFICATIONS
PART NO. 000-0203	DESCRIPTION CASTING, STRAIGHT BRACKET	<u>QTY</u> 2		CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
000-0209 018-0350 018-1144	CASTING, SIDE FILLER, SHORT DOUBLE RAIL SLIDE SIT DOWN HOOD	2 2 1 1		CASTING, SIDE FILLER, SHORT: A56 Aluminum. Finished with baked on powder coating.
030-0441 030-0755 036-1374	DOUBLE SLIDE EXIT SUPPORT MOUNTING TUBE 6 13/16" - S5000 HARDWARE PACKAGE	1 2 1		DOUBLE RAIL SLIDE: Linear, low density, rotationally molded, U.V. stabilized, polyethylene, .250" thick, double wall construction. Molded in 3/8" T-nut inserts and textured surface.
				<u>SIT DOWN HOOD</u> : 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.
				DOUBLE SLIDE EXIT SUPPORT: One piece all welded construction consisting of 1.660" OD x 13 GA galvanized steel tubing and 2 1/2" x 1 1/2" x 3/16" HRS angle. Finished with a baked on powder coating.
				MOUNTING TUBE 6 13/16" - S5000: One piece all welded construction consisting of a 1.315 OD x .083" wall galvanized tube and a 12L14 steel threaded insert. Finished with a baked on powder coating.
				HARDWARE PACKAGE: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.
Note: Hardware package(s) may include extra hardware				
that is not no	ecessary for this installation.			SHIPPING WEIGHT: 127 LBS.

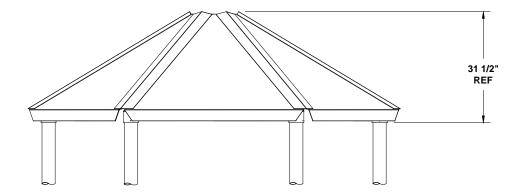
## NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

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

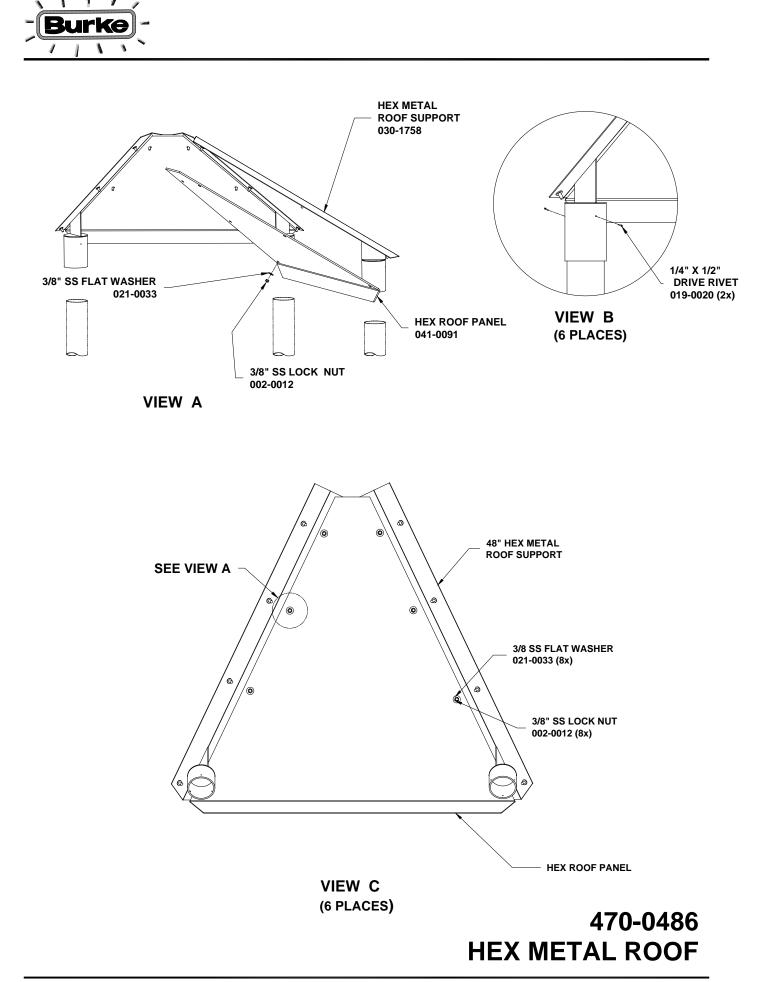
- 1. After platform has been installed, locate and dig footing hole as per dimensions shown. See footing detail drawing, which is located in the preface of your installation manual.
- Attach DOUBLE SLIDE EXIT SUPPORT to slide using 3/8" x 3/4" button head cap screws and 3/8" washers. See DETAIL A. Tighten fasteners.
- Position slide into footing holes. Attach slide to platform using 3/8" x 1 3/4" button head cap screws, 3/8" washers and 3/8" nuts. See DETAIL B. Make sure that the slide is flush and tight to platform.
- Locate holes on 5" O.D. posts for mounting CAST SIDE FILLERS and assemble to posts using 3/8" x 1" SS button head cap screws and 5/16" SS washers. See DETAIL C.
- 5. Locate holes on 5" O.D. posts for mounting SIT DOWN HOOD assembly.
- Insert MOUNTING TUBES into sit down hood and attach using 3/8" x 1" button head cap screws and 3/8" slotted washers. See DETAIL C.
- 7. Attach STRAIGHT BRACKETS to 5" O.D. posts using 3/8" x 1" button head cap screws and 5/16" washers. See DETAL C.
- 8. Attach sit-down hood to slide using 3/8" x 1 1/4" button head cap screws, and 3/8" SS flat washers. See SECTION D-D.
- 9. Tighten all hardware.
- 10. Block-up, level and plumb.
- 11. Pour concrete. Let set for two to three days.
- 12. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.







470-0486 HEX METAL ROOF

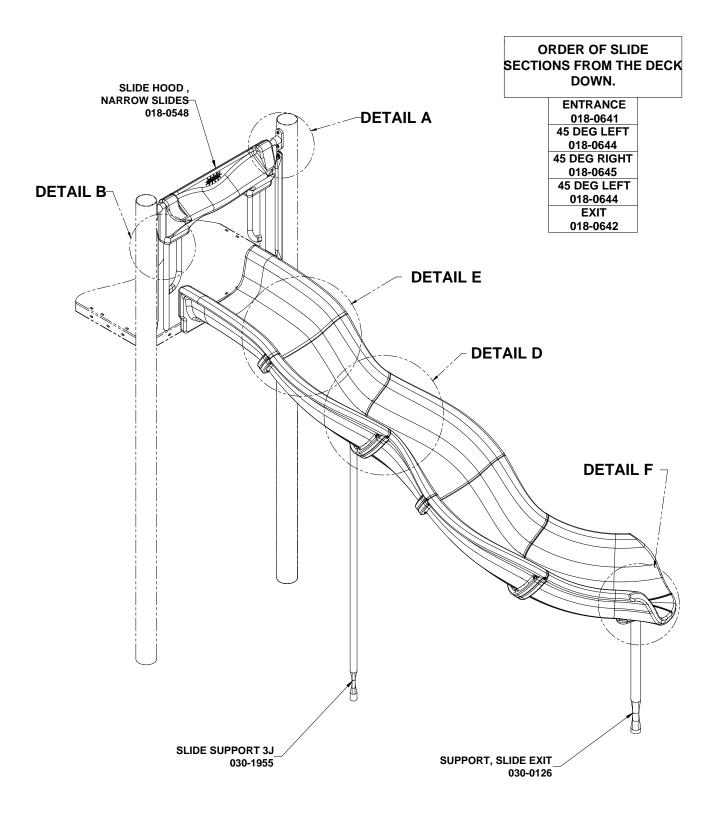


PARTS LIST		SPECIFICATIONS
PART NO.DESCRIPTION030-175848" HEX METAL ROOF SUPI036-1186HARDWARE PACKAGE041-0091HEX ROOF PANEL	1 6	<ul> <li><u>48" HEX METAL ROOF SUPPORT</u>: One piece all welded construction consisting of 5" OD X 3/16 wall tubing, 12 ga galv sheet steel, 10 ga galv sheet steel, 8 ga galv sheet steel and 3/8-16 X 3/4" weld screws. Finished with a baked on powder coating.</li> <li><u>HARDWARE PACKAGE</u>: Stainless steel washers, zinc plated steel nuts and aluminum rivets with stainless steel pins.</li> <li><u>HEX ROOF PANEL</u>: 14 ga galv sheet steel, finished with a baked on powder coating.</li> </ul>
Note: Hardware package(s) may include ex that is not necessary for this installation.		SHIPPING WEIGHT: 280 LBS.

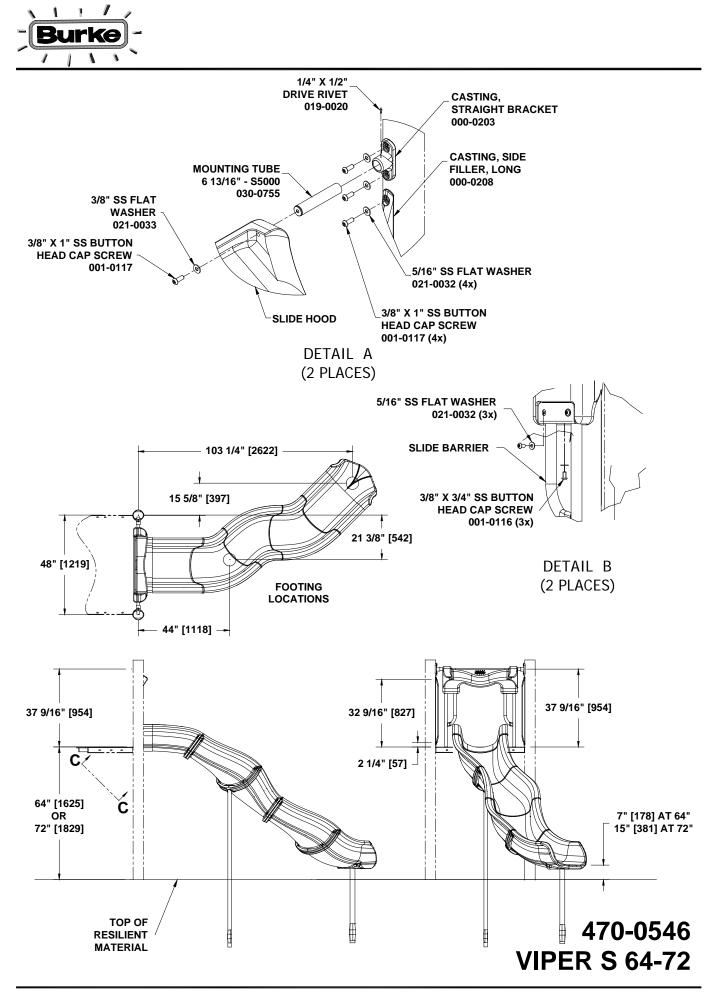
NOTE: Do not tighten hardware until instructed to do so.

- 1. Position 2 METAL ROOF SUPPORTS on flat surface with weld screws facing up.
- Position 1 HEX ROOF PANEL over metal roof supports, aligning weld screws on the supports with the slotted openings in the panels. Wide end of panel should be nearest to capped ends of roof supports, with flange facing up. (When positioned on structure, flange will face downward). Secure panel to roof supports using 3/8" SS FLAT WASHERS and 3/8" LOCKNUTS. SEE VIEW C.
- 3. Assemble 2 more panels together following steps 1 & 2.
- 4. Position assembled panels and supports on top of posts.
- 5. Attach remaining roof panels to roof using 3/8" SS flat washers, 3/8" lock nuts. SEE VIEW A.
- 6. Tighten all hardware.
- 7. Drill 1/4" diameter holes through metal roof supports and posts, using holes in roof supports as guides. SEE VIEW B.
- 8. Install 1/4" diameter drive rivets and hammer pin. SEE VIEW B.

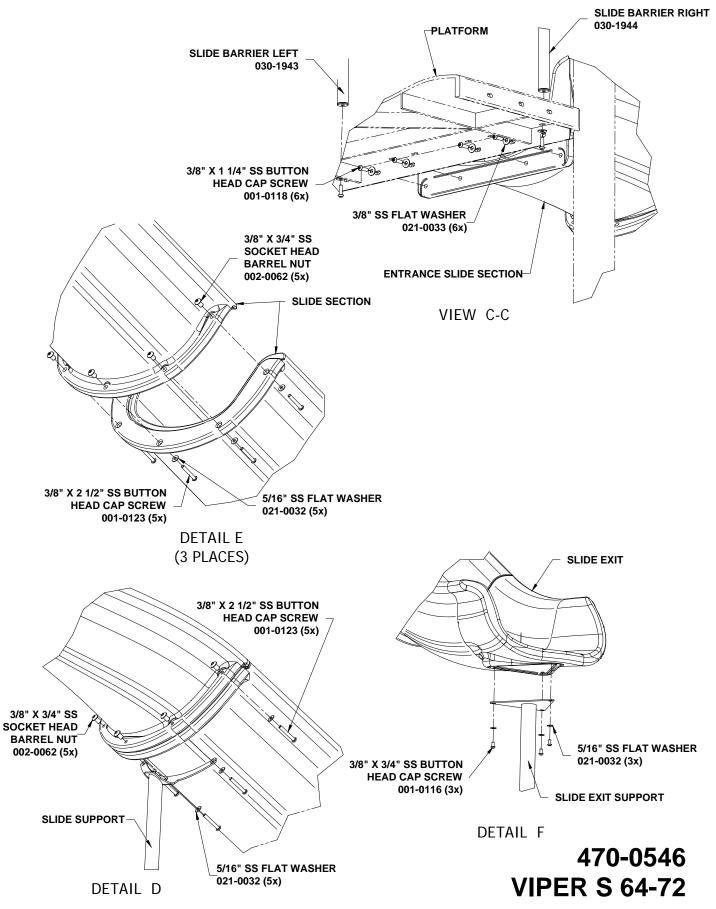




# 470-0546 VIPER S 64-72







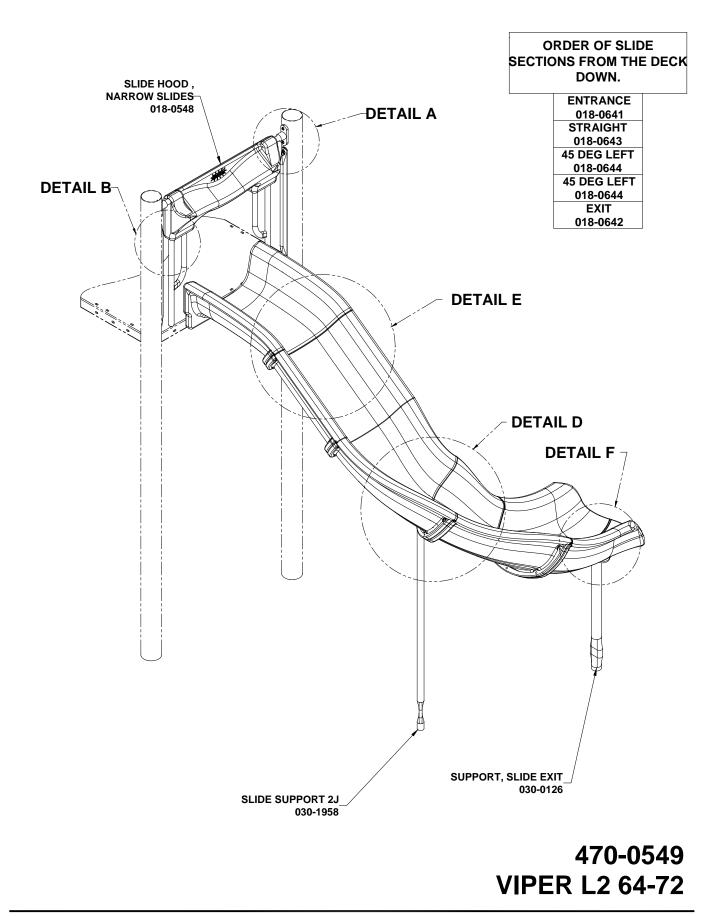
000-0203CASTING, STRAIGHT BRACKET2000-0208CASTING, SIDE FILLER, LONG2018-0548SLIDE HOOD , NARROW SLIDES1018-0641ENTRANCE SLIDE SECTION1018-0642EXIT SLIDE SECTION1018-064445 DEG LEFT SLIDE SECTION2018-064545 DEG RIGHT SLIDE SECTION1030-0126SUPPORT, SLIDE EXIT1030-1943SLIDE BARRIER LEFT1030-1944SLIDE BARRIER RIGHT1030-1955SLIDE SUPPORT 3J1036-1143HARDWARE PACKAGE2036-1148HARDWARE PACKAGE1MOUNTSLIDE SUPPORT 3J1036-1148HARDWARE PACKAGE1	SPECIFICATIONS
	OOD. NARROW SLIDES: ENTRANCE SLIDE SECTION: EXIT SLIDE         Y: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized         ene with double wall construction, molded in 3/8" T-nut inserts, and a surface.         LEFT SLIDE SECTION: 45 DEG RIGHT SLIDE SECTION: 1/4" thick, w density, rotationally molded, U.V. stabilized polyethylene with double truction, and a textured surface.         RT, SLIDE EXIT: One piece all welded construction consisting of 2 3/8" GA galvanized steel tubing and 8 GA galvanized sheet steel. Finished ked on powder coating.         NG TUBE 6 13/16" - S5000: One piece all welded construction go f a 1.315 OD x .083" wall galvanized tube and a 12L14 steel insert. Finished with a baked on powder coating.         ARRIER LEFT; SLIDE BARRIER RIGHT : One piece all welded ion consisting of 1.315" OD x 12 GA galvanized steel tubing, 10 GA ad sheet steel, and HDPE threaded inserts. Finished with a baked on
that is not papagage for this installation	PING WEIGHT: 185 LBS.

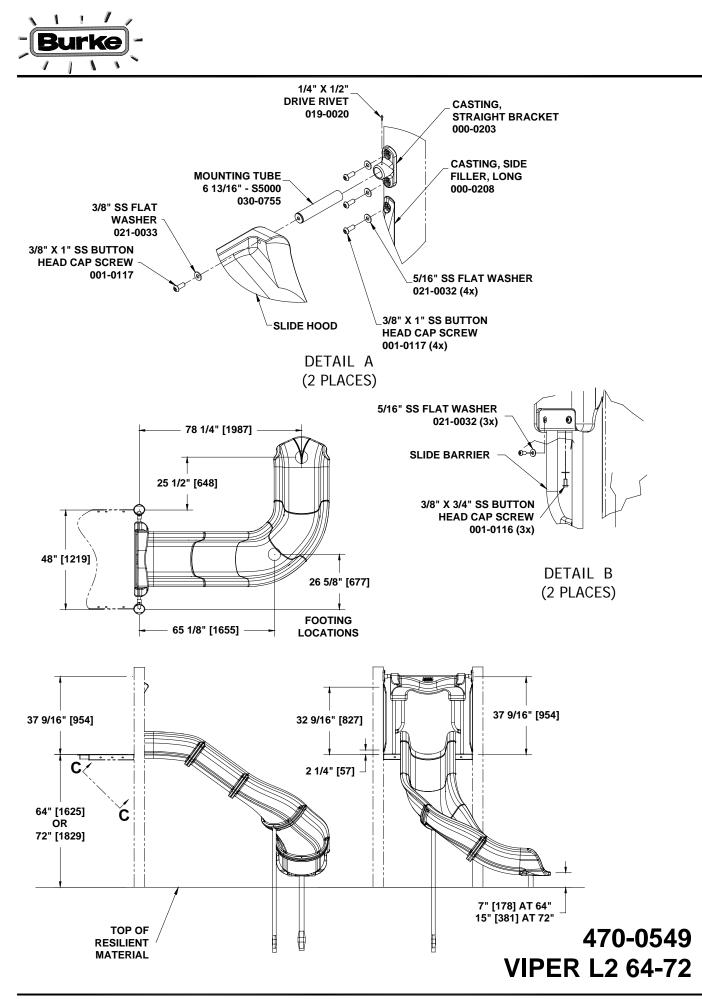
NOTE: When assembling the slide sections, if there is any alignment difference between slide sections, either in the bedway or the top rails, try to assemble so the alignment differencee would drop off rather than raise up when going down the slide. See DETAIL E. NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

NOTE: Specific hardware used for assembly is shown in the Detail views.

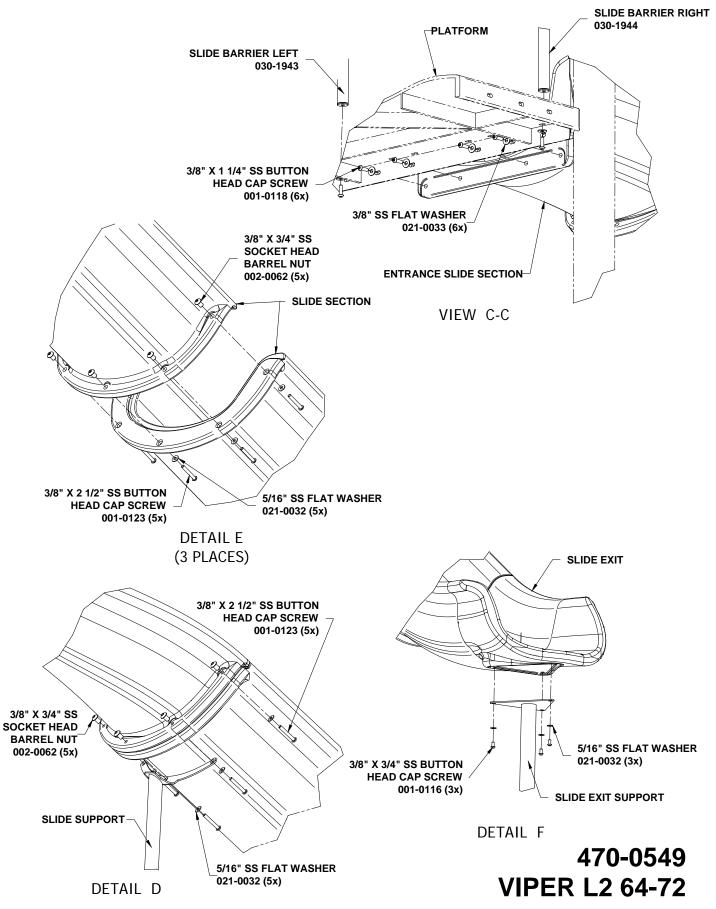
- 1. Install platform(s). See appropriate installation instructions located in your installation manual.
- 2. Dig footing holes for slide supports per dimensions shown. See typical concrete footing details which are located in the preface of your installation manual.
- 3. Attach CAST SIDE FILLER, LONG to 5" O.D. posts as shown in DETAIL A.
- 4. Assemble the slide chute. The order of slide sections is shown on the chart, and the assembly method and hardware is shown in DETAIL D & E. It is important to have the slide sections in good alignment and this is determined by the assembly. If possible, you want to avoid having any uphill bumps or misalignments as you would go down the slide. If there are any misalignments, either in the bedway or the top rails, try to assemble so the misalignment would drop off rather than raise up when going down the slide. It usually works best to put two sections together with all the hardware loose first. Tighten the middle screw under the middle of the bedway first, making sure to align the bedway surfaces and the top surface of the outside rails with any misalignment dropping off downhill. Then tighten the screws on both sides, while holding the sidewalls in good alignment. Complete this assembly for all slide sections in each slide chute, making sure to attach the SLIDE SUPPORT where shown in front view and as detailed in DETAIL D. Also attach the SLIDE EXIT SUPPORT as shown in DETAIL F.
- 5. Attach the assembled slide chute to the platform as shown in VIEW C-C. The slide support and exit support should fall into the footing holes, and should rest on spacers in the bottom of the hole to avoid stress on the attachment joints and platform. If necessary, place spacers, such as bricks, in the hole under the supports to shim up and provide support. Make sure proper exit height is attained. Once aligned and supported properly, attach the SLIDE ENTRANCE to the platform as shown in VIEW C-C.
- 6. Attach one Casting Straight Bracket to post. See DETAIL A.
- 7. Attach SLIDE HOOD as shown in DETAIL A & B. Attach two mounting tubes to slide hood on both sides. Attach both Side Barriers to the slide hood. Bring the hood to the post with the Casting Straight Bracket already attached, slide the mounting tube into the casting attached to the post. Slide the bracket casting onto the mounting tube on the opposite side, attach the bracket casting to the post. Make sure the hood is centered between the posts. Attach Slide Barriers to platform as shown in VIEW C-C.
- 8. Tighten all hardware.
- 9. Drill 1/4" diameter hole through bracket castings. Insert 1/4" X 1/2" drive rivet and engage drive rivet by hammering until pin is flush with head of rivet. See DETAIL A.
- 10. Pour concrete and allow concrete to set for 2-3 days.
- 11. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines











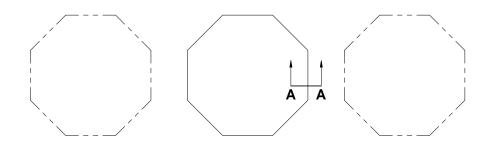
000-0203CASTING, STRAIGHT BRACKET2000-0208CASTING, SIDE FILLER, LONG2018-0548SLIDE HOOD, NARROW SLIDES1018-0641ENTRANCE SLIDE SECTION1018-0642EXIT SLIDE SECTION1018-0643STRAIGHT SLIDE SECTION1018-064445 DEG LEFT SLIDE SECTION2030-0126SUPPORT, SLIDE EXIT1030-0755MOUNTING TUBE 6 13/16" - S50002030-1943SLIDE BARRIER LEFT1030-1958SLIDE SUPPORT 2J1036-1143HARDWARE PACKAGE2036-1148HARDWARE PACKAGE1	CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated.
P S F H	<ul> <li>Finished with baked on powder coating.</li> <li>CASTING, SIDE FILLER, LONG: A56 Aluminum. Finished with baked on powder coating.</li> <li>SLIDE HOOD. NARROW SLIDES: ENTRANCE SLIDE SECTION: EXIT SLIDE SECTION: 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 extured surface.</li> <li>STRAIGHT SLIDE SECTION: 45 DEG LEFT SLIDE SECTION: 1/4" thick, inear, low density, rotationally molded, U.V. stabilized polyethylene with double vall construction, and a textured surface.</li> <li>SUPPORT, SLIDE EXIT: One piece all welded construction consisting of 2 3/8" DD x 12 GA galvanized steel tubing and 8 GA galvanized sheet steel. Finished with a baked on powder coating.</li> <li>MOUNTING TUBE 6 13/16" - S5000: One piece all welded construction consisting of a 1.315 OD x .083" wall galvanized tube and a 12L14 steel hreaded insert. Finished with a baked on powder coating.</li> <li>SLIDE BARRIER LEFT; SLIDE BARRIER RIGHT: One piece all welded construction consisting of 1.315" OD x 12 GA galvanized steel tubing, 10 GA galvanized sheet steel, and HDPE threaded inserts. Finished with a baked on powder coating.</li> <li>SLIDE SUPPORT 2J: 8 gage formed plate welded to 1.660" OD tubing. Finished with baked on powder coat.</li> <li>MARDWARE PACKAGE: Stainless steel</li> </ul>
that is not necessary for this installation	ARDWARE PACKAGE: Stainless steel hardware and aluminum rivets. SHIPPING WEIGHT: 183 LBS.

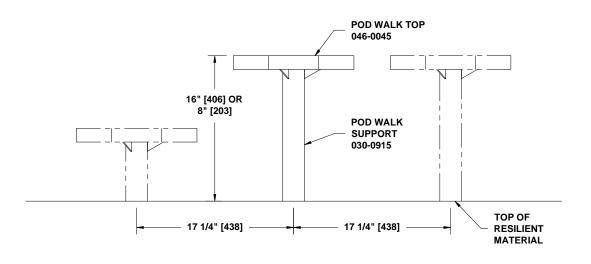
NOTE: When assembling the slide sections, if there is any alignment difference between slide sections, either in the bedway or the top rails, try to assemble so the alignment difference would drop off rather than raise up when going down the slide. See DETAIL E. NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

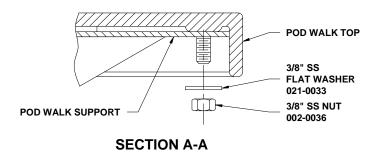
NOTE: Specific hardware used for assembly is shown in the Detail views.

- 1. Install platform(s). See appropriate installation instructions located in your installation manual.
- 2. Dig footing holes for slide supports per dimensions shown. See typical concrete footing details which are located in the preface of your installation manual.
- 3. Attach CAST SIDE FILLER, LONG to 5" O.D. posts as shown in DETAIL A.
- 4. Assemble the slide chute. The order of slide sections is shown on the chart, and the assembly method and hardware is shown in DETAIL D & E. It is important to have the slide sections in good alignment and this is determined by the assembly. If possible, you want to avoid having any uphill bumps or misalignments as you would go down the slide. If there are any misalignments, either in the bedway or the top rails, try to assemble so the misalignment would drop off rather than raise up when going down the slide. It usually works best to put two sections together with all the hardware loose first. Tighten the middle screw under the middle of the bedway first, making sure to align the bedway surfaces and the top surface of the outside rails with any misalignment dropping off downhill. Then tighten the screws on both sides, while holding the sidewalls in good alignment. Complete this assembly for all slide sections in each slide chute, making sure to attach the SLIDE SUPPORT where shown in front view and as detailed in DETAIL D. Also attach the SLIDE EXIT SUPPORT as shown in DETAIL F.
- 5. Attach the assembled slide chute to the platform as shown in VIEW C-C. The slide support and exit support should fall into the footing holes, and should rest on spacers in the bottom of the hole to avoid stress on the attachment joints and platform. If necessary, place spacers, such as bricks, in the hole under the supports to shim up and provide support. Make sure proper exit height is attained. Once aligned and supported properly, attach the SLIDE ENTRANCE to the platform as shown in VIEW C-C.
- 6. Attach one Casting Straight Bracket to post. See DETAIL A.
- 7. Attach SLIDE HOOD as shown in DETAIL A & B. Attach two mounting tubes to slide hood on both sides. Attach both Side Barriers to the slide hood. Bring the hood to the post with the Casting Straight Bracket already attached, slide the mounting tube into the casting attached to the post. Slide the bracket casting onto the mounting tube on the opposite side, attach the bracket casting to the post. Make sure the hood is centered between the posts. Attach Slide Barriers to platform as shown in VIEW C-C.
- 8. Tighten all hardware.
- 9. Drill 1/4" diameter hole through bracket castings. Insert 1/4" X 1/2" drive rivet and engage drive rivet by hammering until pin is flush with head of rivet. See DETAIL A.
- 10. Pour concrete and allow concrete to set for 2-3 days.
- 11. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines





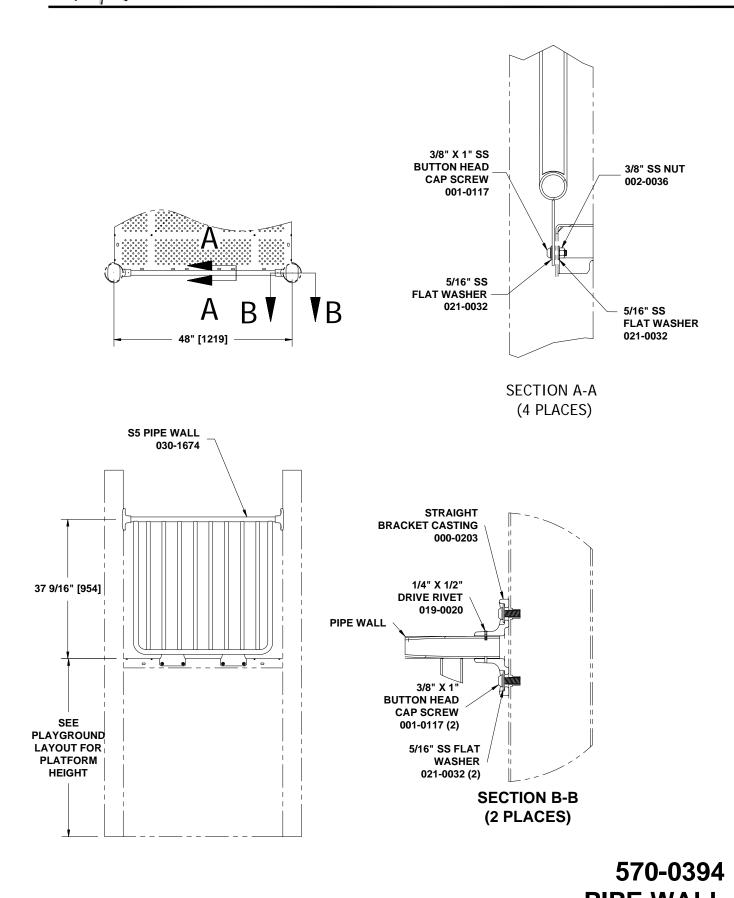




560-0526 SINGLE POD WALK 8"-16"

	PARTS LIST		SPECIFICATIONS
PART NO. 030-0915 036-0596 046-0045	POD WALK SUPPORT 40" HARDWARE PACKAGE POD WALK TOP	<u>QTY</u> 1 1	<ul> <li>POD WALK SUPPORT 40": One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and 10 GA galvanized sheet steel. Finished with a baked on powder coating.</li> <li>HARDWARE PACKAGE: Stainless steel.</li> <li>POD WALK TOP: Formed 1/8" sheet steel with studs welded into place. PVC coated after fabrication.</li> </ul>
	vare package(s) may include extra ecessary for this installation.	a hardware	SHIPPING WEIGHT: 27 LBS.

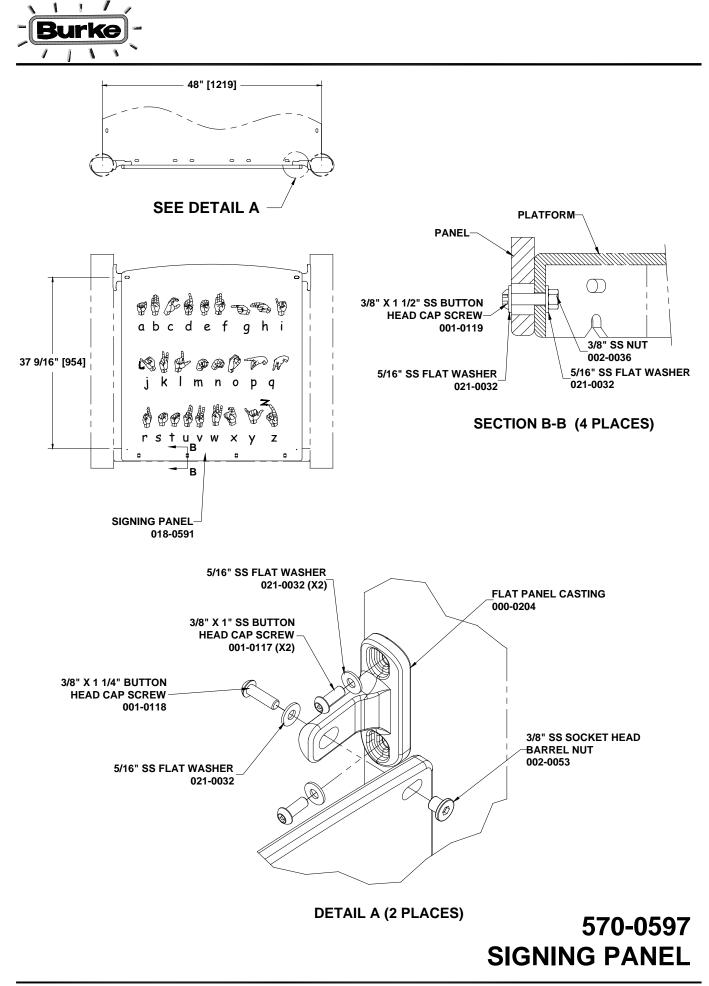
- 1. Determine location of Pod Walk.
- 1. Dig footing holes per dimensions. See typical footing details, which are located in the preface of your installation manual.
- 2. Attach POD WALK SUPPORT to POD WALK TOP using 3/8 SS flat washers and 3/8 SS nuts. See SECTION A-A.
- 3. Tighten hardware
- 4. Insert Pod Walk into footing hole. and block up, plumb and level.
- 5. Pour concrete and let set 2-3 days.
- 6. Install resilient surfacing material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



	PARTS LIST		SPECIFICATIONS
PART NO. 000-0203 030-1674 036-0258 036-0806 036-0819	PARTS LIST DESCRIPTION CASTING, STRAIGHT BRACKET S5 PIPE WALL HARDWARE PACKAGE HARDWARE PACKAGE HARDWARE PACKAGE	<b>QTY</b> 2 1 4 1 1	SPECIFICATIONS         CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.         S5 PIPE WALL: One piece all welded construction consisting of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14 GA galvanized steel tubing. Finished with a baked on powder coating.         HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless steel.         HARDWARE PACKAGE: Aluminum Rivets
	are package(s) may include extra harc ecessary for this installation.	lware	SHIPPING WEIGHT: 37 LBS.

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

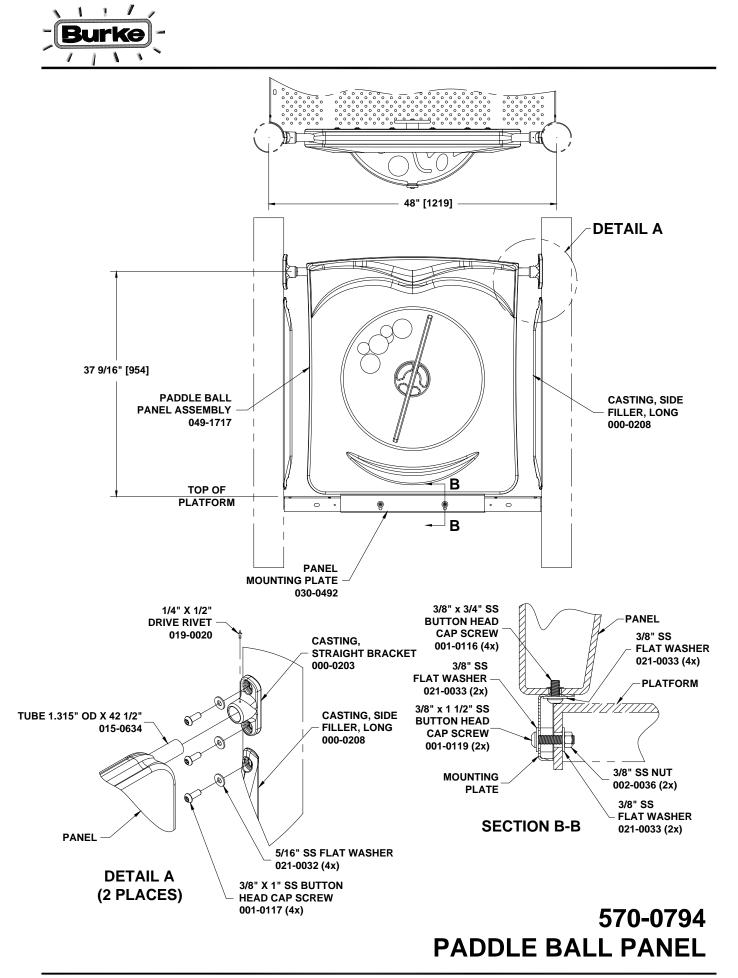
- 1. Slide BRACKETS onto tube on PIPE WALL.
- Attach brackets with pipe wall to 5" OD post using 3/8" x 1" SS button head cap screws and 5/16" SS washers. See SECTION B-B.
- 3. Attach bottom of pipe wall to platform using 3/8" x 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. Tighten all hardware. See SECTION A-A.
- 4. Drill 1/4" diameter holes through pilot hole, into pipe wall and through mounting bracket. See SECTION B-B.
- 5. Drive rivets flush with brackets and pipe wall.
- 6. Tighten All Hardware.



	💳 PARTS LIST 💳			SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>		CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.
000-0204 018-0591	CASTING, FLAT PANEL SIGNING PANEL	2 1	F	Finished with baked on powder coating.
036-1241	HARDWARE PACKAGE	1	<u> </u>	SIGNING PANEL: 3/4" co-extruded HDPE.
			ŀ	HARDWARE PACKAGE: Stainless steel
Note: Hardw that is not n	ware package(s) may include extr ecessary for this installation.	ra hardware		SHIPPING WEIGHT: 46 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. 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 the 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.
- 3. Attach panel to castings using 3/8" x 1 1/4" SS button head cap screws, 5/16" SS flat washers, and 3/8" SS socket head barrel nuts. See DETAIL A.
- 4. Level panel and tighten all hardware.

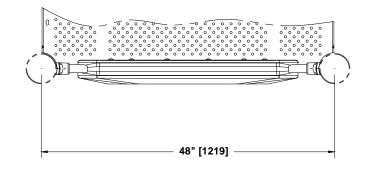


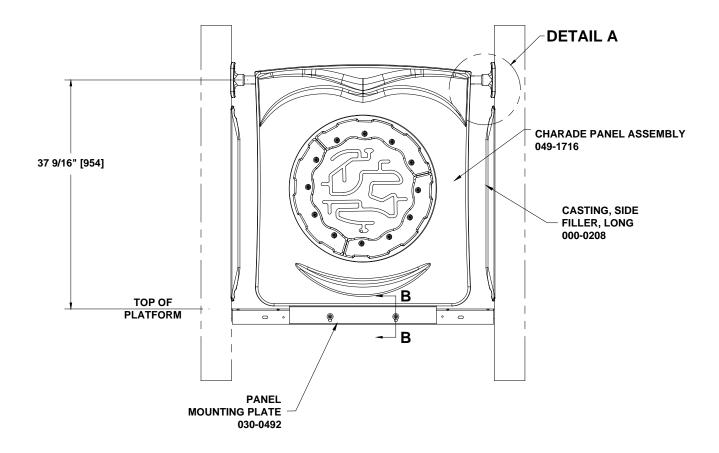
	PARTS LIST		SPECIFICATIONS				
PART NO. 000-0203	DESCRIPTION CASTING, STRAIGHT BRACKET	<u>QTY</u> 2 2	<u>CASTING, STRAIGHT BRACKET</u> : A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.				
000-0208 015-0634 030-0492	CASTING, SIDE FILLER, LONG TUBE 1.315" OD X 42 1/2" PANEL MOUNTING PLATE	2 1 1	CASTING, SIDE FILLER, LONG: A56 Aluminum. Finished with baked on powder coating.				
036-1168 049-1717	HARDWARE PACKAGE PADDLE BALL PANEL ASSEMBLY	1 1	TUBE 1.315" OD X 42 1/2": 1.315" O.D. GALV TUBING				
			PANEL MOUNTING PLATE: One piece all welded construction consisting of 10 GA and 14 GA galvanized steel plates. Finished with a baked on powder coating.				
			HARDWARE PACKAGE: Aluminum rivets and stainless steel screws, nuts, and washers.				
			PADDLE BALL PANEL ASSEMBLY: Assembly consisting of a 1/4" LLDPE double wall rotationally molded panel with spacers made of nylatron, flat window of 1/4" Lexan, bubble made of 3/16" Lexan, paddle ball wheel of 1/2" extruded HDPE, paddle of 3/4" extruded HDPE and ball kit all assembled together with stainless steel hardware.				
	vare package(s) may include extra hardw ecessary for this installation.	are	SHIPPING WEIGHT: 47 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 PANEL MOUNTING PLATE to PADDLE BALL PANEL using 3/8" x 3/4" SS button head cap screws and 3/8"SS flat washers. See SECTION B-B.
- 2. Sleeve TUBE 1.315" OD X 42 1/2" into panel. See DETAIL A.
- Position panel assembly on 5" OD posts and fasten upper hole of CASTING BRACKETS to 5" OD posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 4. Rotate panel assembly up 90 degrees and fasten lower hole in casting brackets to 5" OD posts with 3/8" x 1" SS button head cap screw and 5/16" SS flat washers. See DETAIL A.
- 5. Tighten hardware.
- 6. Rotate panel down to the platform and fasten mounting plate to platform using 3/8" x 1 1/2" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. Tighten hardware. See SECTION B-B.
- 7. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

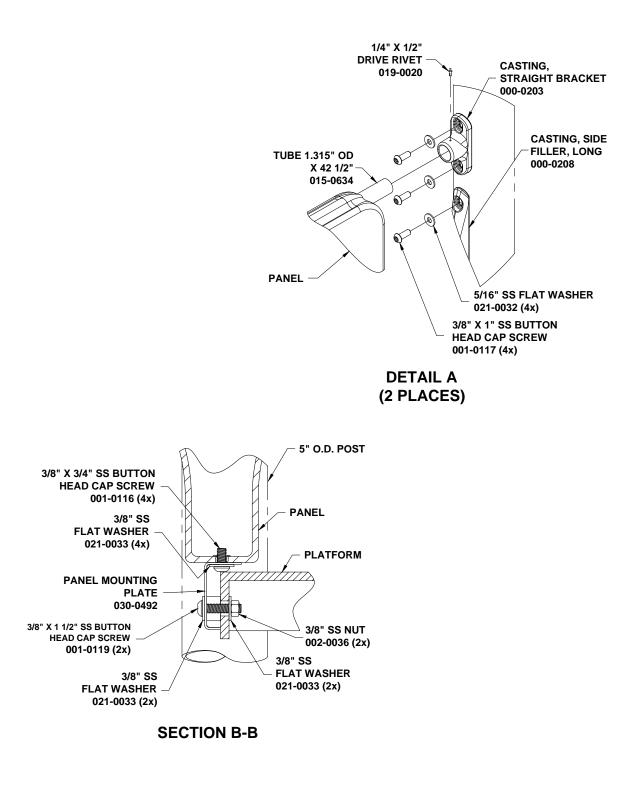






570-0797 CHARADE PANEL, ABOVE PLATFORM





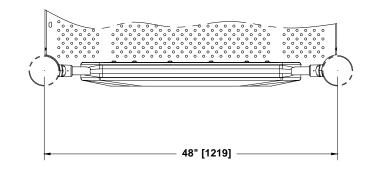
# 570-0797 CHARADE PANEL, ABOVE PLATFORM

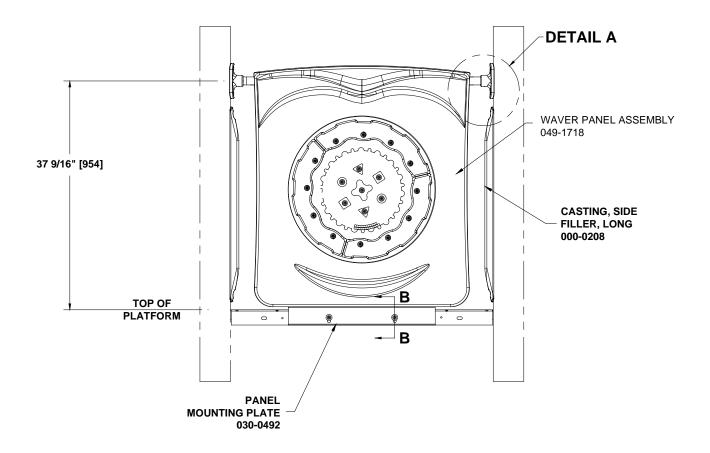
	PARTS LIST		SPECIFICATIONS
PART NO. 000-0203	DESCRIPTION CASTING, STRAIGHT BRACKET	<u>QTY</u> 2	<u>CASTING, STRAIGHT BRACKET</u> : A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
000-0208 015-0634 030-0492 036-1168 049-1716	CASTING, SIDE FILLER, LONG TUBE 1.315" OD X 42 1/2" PANEL MOUNTING PLATE HARDWARE PACKAGE CHARADE PANEL ASSEMBLY	2 1 1 1 1	CASTING, SIDE FILLER, LONG: A56 Aluminum. Finished with baked on powder coating. TUBE 1.315" OD X 42 1/2": 1.315" O.D. GALV TUBING PANEL MOUNTING PLATE: One piece all welded
			construction consisting of 10 GA and 14 GA galvanized steel plates. Finished with a baked on powder coating.
			HARDWARE PACKAGE: Aluminum rivets and stainless steel screws, nuts, and washers.
			<u>CHARADE PANEL ASSEMBLY</u> : Assembly consisting of a 1/4" LLDPE double wall rotationally molded panel, 1/4" clear polycarbonate window, 1/2" extruded HDPE, extruded HDPE and acetal and stainless steel balls all assembled together with stainless steel hardware.
	vare package(s) may include extra hardv ecessary for this installation.	vare	SHIPPING WEIGHT: 62 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. Attach PANEL MOUNTING PLATE to CHARADE PANEL using 3/8" x 3/4" SS button head cap screws and 3/8"SS flat washers. See SECTION B-B.
- Attach SIDE FILLER CASTINGS to post using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 3. Sleeve TUBE 1.315" OD X 42 1/2" into panel. See DETAIL A.
- Position panel assembly on 5" OD posts and fasten upper hole of CASTING BRACKETS to 5" OD posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 5. Rotate panel assembly up 90 degrees and fasten lower hole in casting brackets to 5" OD posts with 3/8" x 1" SS button head cap screw and 5/16" SS flat washers. See DETAIL A.
- 6. Tighten hardware.
- 7. Rotate panel down to the platform and fasten mounting plate to platform using 3/8" x 1 1/2" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. Tighten hardware. See SECTION B-B.
- 8. Drill 1/4" hole through casting and into tube, drive rivet flush with casting. See DETAIL A.
- 9. Apply touch up paint to drive rivet head.
- 10. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

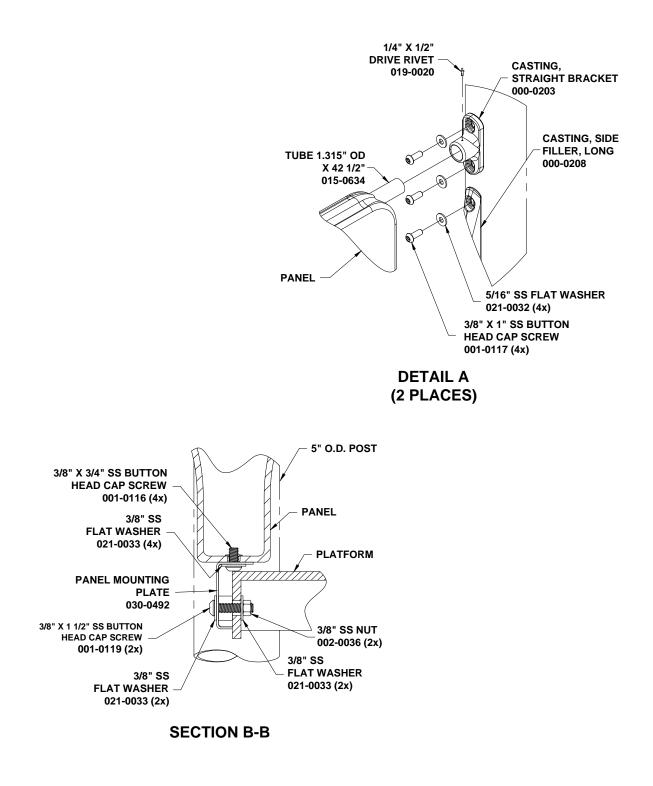






570-0798 WAVER PANEL, ABOVE PLATFORM





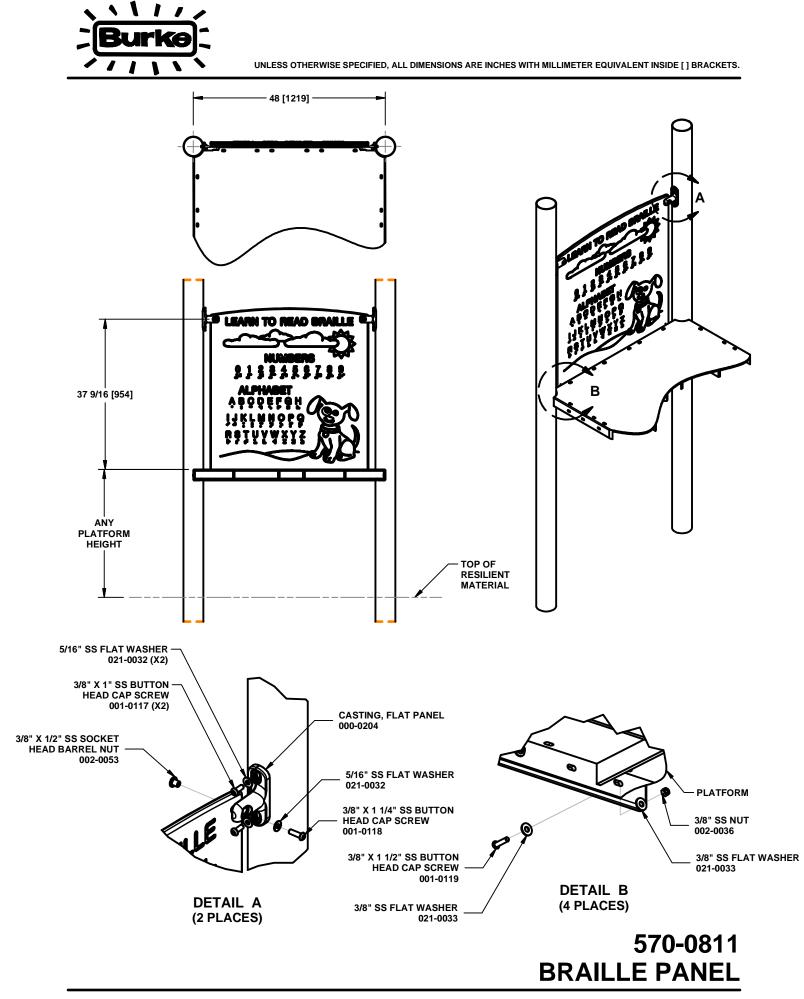
570-0798 WAVER PANEL, ABOVE PLATFORM

	PARTS LIST		SPECIFICATIONS
<u>PART NO.</u> 000-0203	DESCRIPTION CASTING, STRAIGHT BRACKET	<u>QTY</u> 2	<u>CASTING, STRAIGHT BRACKET</u> : A356-T6 Aluminum, Heat- Treated. Finished with baked on powder coating.
000-0208 015-0634 030-0492 036-1168 049-1718	CASTING, SIDE FILLER, LONG TUBE 1.315" OD X 42 1/2" PANEL MOUNTING PLATE HARDWARE PACKAGE WAVER PANEL ASSEMBLY	2 1 1 1 1	CASTING, SIDE FILLER, LONG: A56 Aluminum. Finished with baked on powder coating. <u>TUBE 1.315" OD X 42 1/2"</u> : 1.315" O.D. GALV TUBING <u>PANEL MOUNTING PLATE</u> : One piece all welded
			construction consisting of 10 GA and 14 GA galvanized steel plates. Finished with a baked on powder coating. <u>HARDWARE PACKAGE</u> : Aluminum rivets and stainless steel
			screws, nuts, and washers.
			WAVER PANEL ASSEMBLY: Assembly consisting of a 1/4" LLDPE double wall rotationally molded panel, 1/4" clear polycarbonate window, 1/2" extruded HDPE, extruded HDPE and acetal and stainless steel balls all assembled together with stainless steel hardware.
	vare package(s) may include extra hardvecessary for this installation.	ware	SHIPPING WEIGHT: 62 LBS.
			SHIPPING WEIGHT: 62 LBS.

# INSTALLATION INSTRUCTIONS

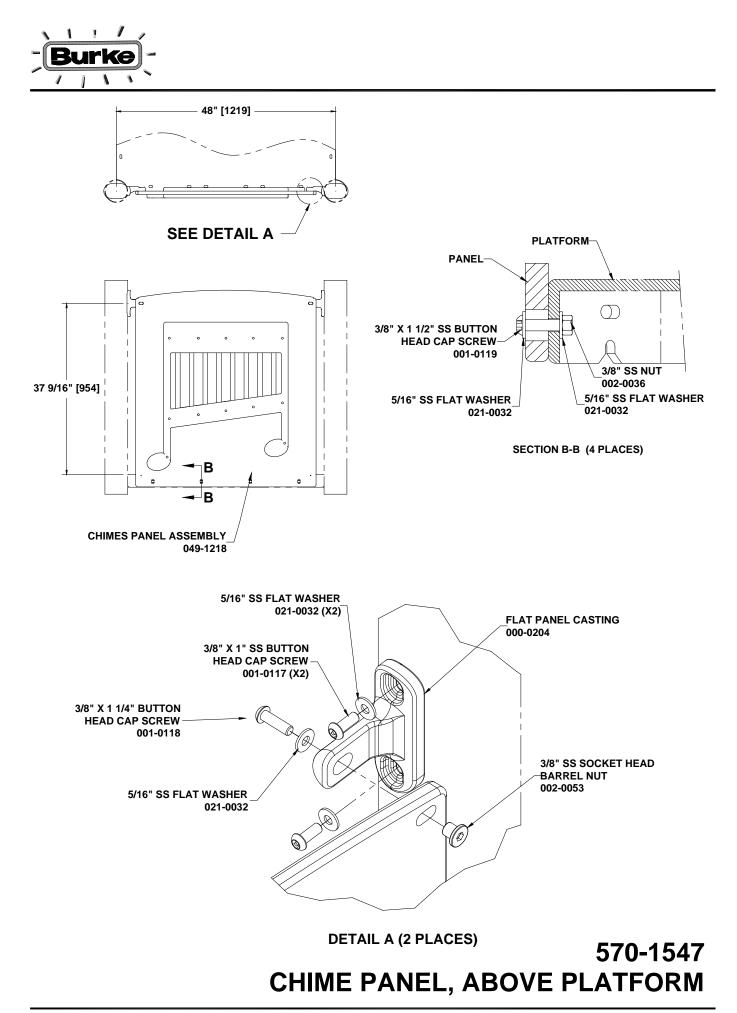
#### NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Attach PANEL MOUNTING PLATE to WAVER PANEL using 3/8" x 3/4" SS button head cap screws and 3/8"SS flat washers. See SECTION B-B.
- Attach SIDE FILLER CASTINGS to post using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 3. Sleeve TUBE 1.315" OD X 42 1/2" into panel. See DETAIL A.
- Position panel assembly on 5" OD posts and fasten upper hole of CASTING BRACKETS to 5" OD posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 5. Rotate panel assembly up 90 degrees and fasten lower hole in casting brackets to 5" OD posts with 3/8" x 1" SS button head cap screw and 5/16" SS flat washers. See DETAIL A.
- 6. Tighten hardware.
- Rotate panel down to the platform and fasten mounting plate to platform using 3/8" x 1 1/2" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. Tighten hardware. See SECTION B-B.
- 8. Drill 1/4" hole through casting and into tube, drive rivet flush with casting. See DETAIL A.
- 9. Apply touch up paint to drive rivet head.
- 10. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



Telephone 920-921-9220

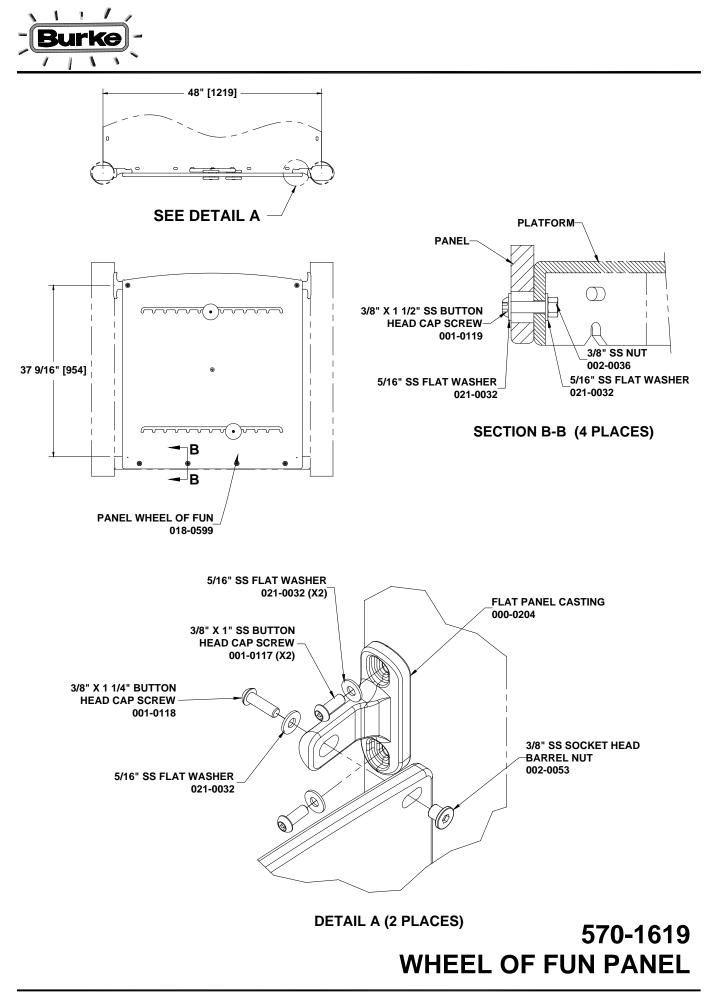
PARTS LIST	SPECIFICATIONS
PART NO. DESCRIPTION QTY	CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.
000-0204 CASTING, FLAT PANEL 2	Finished with baked on powder coating.
036-1241 HARDWARE PACKAGE 1	HARDWARE PACKAGE: Stainless steel
049-1727 BRAILLE PANEL ASSEMBLY 1	BRAILLE PANEL ASSEMBLY: Assembly consisting of
	3/4" co-extruded HDPE and u drive screws.
NOTE: Hardware package(s) may include extra hardware	
that is not necessary for this installation.	SHIPPING WEIGHT: 54 LBS.
NOTE: DVC conting movement to be removed from movement	a belos of porto before installation
NOTE: PVC coating may need to be removed from mountin NOTE: Do not tighten hardware until instructed to do so.	y noies or parts before installation.
1. Determine location of BRAILLE PANEL assembly.	
<ol> <li>Attach CASTING, FLAT PANEL to posts using hardware spe</li> <li>Attach BRAILLE PANEL ASSEMBLY to flat panel castings using the spectrum of th</li></ol>	
4. Attach panel assembly to platform using hardware specified i	
5. Level panel assembly and tighten all hardware.	
6. Install resilient material in accordance to installation guid	delines, ASTM standards and CPSC guidelines.



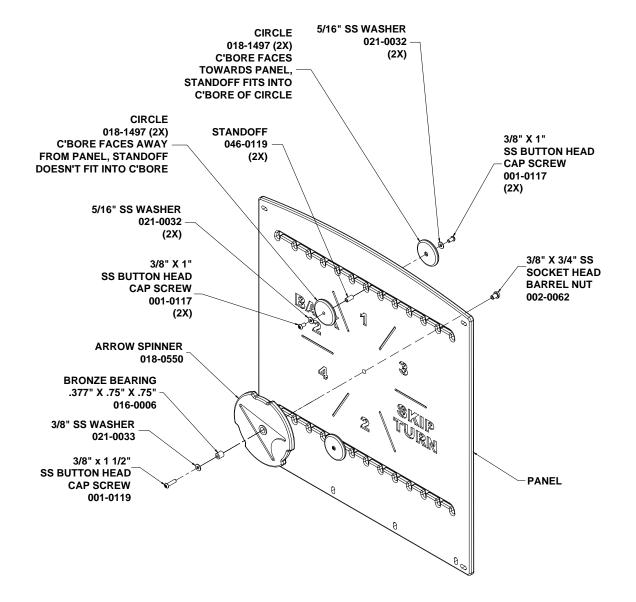
	— PARTS LIST —	1	SPECIFICATIONS
PART NO. 000-0204 036-1241 049-1218	PARTS LIST DESCRIPTION CASTING, FLAT PANEL HARDWARE PACKAGE CHIMES PANEL ASSEMBLY	<u>QTY</u> 2 1 1	SPECIFICATIONS         CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.         Finished with baked on powder coating.         HARDWARE PACKAGE: Stainless steel         CHIMES PANEL ASSEMBLY: Assembly consisting of 3/4"         extruded H.D.P.E. panels, 1" OD x .049" wall stainless steel         tubes, 1/16" diameter stainless steel wire rope, zinc plated         steel washers, zinc plated copper compression sleeves, and         stainless steel screws, T-nuts & 3/8" washers.
Note: Hardv that is not n	vare package(s) may include extra h ecessary for this installation.	ardware	SHIPPING WEIGHT: 60 LBS.
	INS	TALLATION I	

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 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 CHIMES PANEL to the 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.
- 3. Insert 3/8" SS socket head barrel nuts into holes of panel.
- 4. Attach panel to castings using 3/8" x 1 1/4" SS button head cap screws, 5/16" SS flat washers, and 3/8" SS socket head barrel nuts.
- 5. Level panel and tighten all hardware.
- 6. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.







**EXPLODED ASSEMBLY VIEW** 

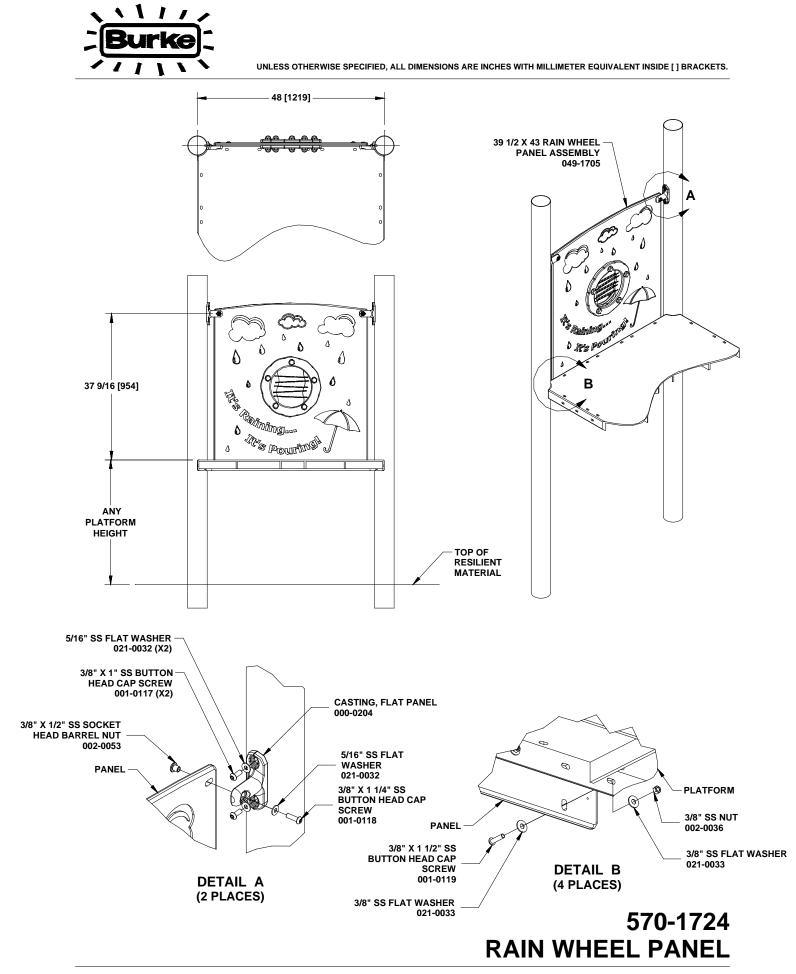


	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.
000-0204 016-0006	CASTING, FLAT PANEL BRONZE BEARING .377" X .75" X	2 1	Finished with baked on powder coating.
	.75"		BRONZE BEARING .377" X .75" X .75": Oil impregnated, bronze.
018-0550 018-0599	ARROW SPINNER PANEL, WHEEL OF FUN	1	bionze.
018-1497 036-1261	CIRCLE HARDWARE PACKAGE	4	ARROW SPINNER; PANEL, WHEEL OF FUN: 3/4" co- extruded HDPE.
046-0119	STANDOFF	2	
			CIRCLE: 1/2" extruded HDPE
			HARDWARE PACKAGE: Stainless steel
			STANDOFF: 1/2" OD threaded stainless steel tubing.
	vare package(s) may include extra hardw	vare	
that is not no	ecessary for this installation.		SHIPPING WEIGHT: 51 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 FLAT PANEL CASTINGS to posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- 2. Attach PANEL to the 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.
- 3. Attach panel to mounting brackets using 3/8" x 1 1/4" SS button head cap screws, 5/16" SS flat washers, and 3/8" SS socket head barrel nuts. See DETAIL A.
- 4. Assemble individual CIRCLES to panel using 1/2" OD X 7/8" STANDOFF, 5/16" SS flat washers and 3/8" x 1" SS button head cap screws. See EXPLODED ASSEMBLY VIEW.
- 5. Test to make sure circle assembly slides freely, if not disassemble and flip one circle part around then reassemble. See EXPLODED ASSEMBLY VIEW.
- 6. Attach ARROW SPINNER to panel using BRONZE BEARING .377" X .75", X .75", 3/8" X 1 1/4" SS button head cap screw, 3/8" SS flat washer and 3/8" X 3/4" SS socket head barrel nut. See EXPLODED ASSEMBLY VIEW.
- 7. Tighten all hardware.
- 8. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.



Telephone 920-921-9220

	PARTS LIST		SPECIFICATIONS
PART NO. 000-0204 036-1241 049-1705	PARTS LIST DESCRIPTION CASTING, FLAT PANEL HARDWARE PACKAGE 39 1/2 X 43 RAIN WHEEL PANEL ASSEMBLY	<u>QTY</u> 2 1	SPECIFICATIONS         CASTING, FLAT PANEL: A356-T6 Aluminum, Heat- Treated.         Finished with baked on powder coating.         HARDWARE PACKAGE: Stainless steel         39 1/2 X 43 RAIN WHEEL PANEL ASSEMBLY: 3/4" co- extruded HDPE, 3/4" extruded HDPE, 1/2" extruded HDPE, injection molded HDPE bolt covers, polycarbonate windows, polycarbonate baffle plates, stainless steel balls, stainless steel ball bearings & stainless steel hardware.
	are package(s) may include extra hardvecessary for this installation.	vare	SHIPPING WEIGHT: 52 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.

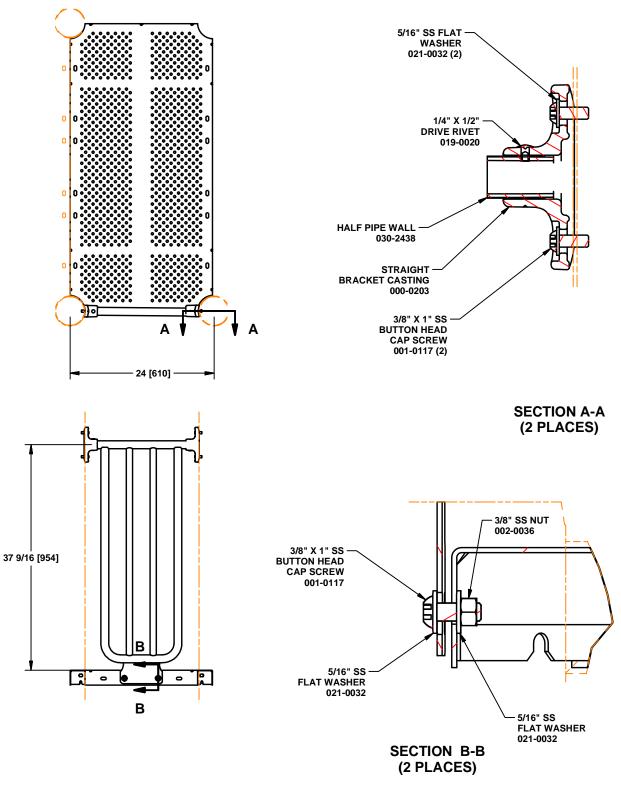
- 1. Determine location of RAIN WHEEL PANEL assembly.
- 2. Attach CASTING, FLAT PANEL to posts using hardware specified in DETAIL A.
- 3. Attach 39 1/2 X 43 RAIN WHEEL PANEL ASSEMBLY to flat panel castings using hardware specified in DETAIL A.
- 4. Attach panel assembly to platform using hardware specified in DETAIL B.
- 5. Level panel assembly and tighten all hardware.
- 6. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

570-1724.doc Description: RAIN WHEEL PANEL

REV: 01 PCN: 14-0029 2/28/2014







570-2624 HALF PIPE WALL ASSEMBLY

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

	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	CASTING, STRAIGHT BRACKET: A356-T6 Aluminum, Heat-
000-0203	CASTING, STRAIGHT BRACKET	2	Treated. Finished with baked on powder coating.
030-2438	HALF PIPE WALL	1	HALF PIPE WALL: One piece all welded construction consisting
	HARDWARE PACKAGE	1	of 1.315" OD x 14 GA, 1.315" OD x 12 GA, and 1.029" OD x 14
	HARDWARE PACKAGE	1	GA galvanized steel tubing. Finished with a baked on powder
036-0870	HARDWARE PACKAGE	1	coating.
			HARDWARE PACKAGE: Aluminum Rivets
			HARDWARE PACKAGE: Stainless steel screws, washers & nuts, nylon washers and zinc plated steel lock washer.
			nuto, myton washers and zine plated steel look washer.
			HARDWARE PACKAGE: Stainless steel.
	rdware package(s) may include extra hard	lware	
	necessary for this installation.		SHIPPING WEIGHT: 19.6 LBS.

#### **INSTALLATION INSTRUCTIONS**

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

1. Slide BRACKETS onto tube on HALF PIPE WALL.

2. Attach BRACKETS with pipe wall to 5" OD post using 3/8" x 1" SS button head cap screws and 5/16" SS washers. See SECTION A-A.

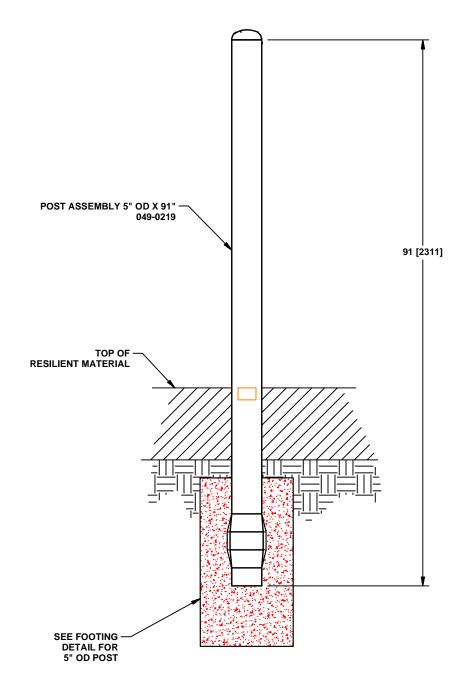
3. Attach bottom of pipe wall to platform using 3/8" x 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. Tighten all hardware. See SECTION B-B.

4. Drill 1/4+diameter holes through pilot hole, into pipe wall and through mounting bracket. See SECTION A-A.

5. Drive rivets flush with brackets and pipe wall.

6. Tighten All Hardware.



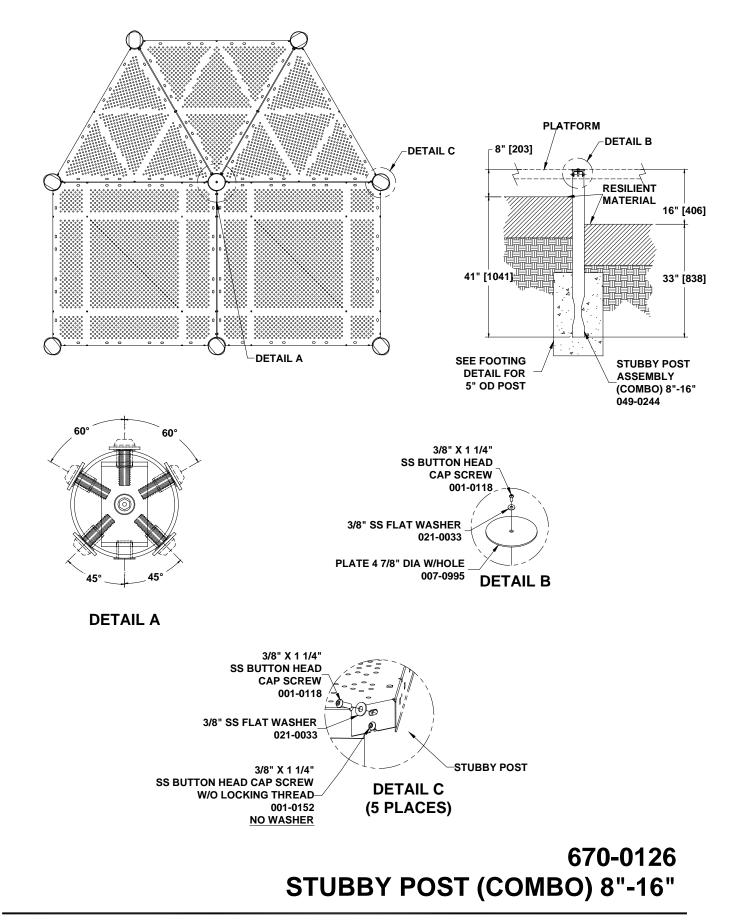


# 670-0001 POST ASSEMBLY 5" OD X 91"

	PARTS LIST	]	SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	POST ASSEMBLY 5" OD X 91": Assembly consisting of 5" OD
049-0219	POST ASSEMBLY 5" OD X 91"		x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	ardware package(s) may include extra necessary for this installation.	hardware	SHIPPING WEIGHT: 49 LBS.
		<b>FALLATION</b>	
		l dig footing	INSTRUCTIONS hole as per typical concrete footing drawing, manual.
which is	mine 5+OD post location and	l dig footing r installatior	hole as per typical concrete footing drawing, manual.
which is 2. Insert	mine 5+OD post location and located in the preface of you	l dig footing r installatior -up and plu	hole as per typical concrete footing drawing, manual.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour of</li><li>4. Instal</li></ul>	mine 5+OD post location and located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accore	l dig footing r installatior -up and plu s.	hole as per typical concrete footing drawing, manual. mb post.

670-0001 POST ASSEMBLY 5" OD X 91" REV: 02 PCN: 16-0257 12/5/2016





		1	
PART NO. 007-0995 036-1198 049-0244	PARTS LIST DESCRIPTION PLATE 4 7/8" DIA W/HOLE HARDWARE PACKAGE STUBBY POST ASSEMBLY (COMBO) 8"-16"	<u>QTY</u> 1 1	SPECIFICATIONS PLATE 4 7/8" DIA W/HOLE: 14 GA HRPO, PVC Dipped. HARDWARE PACKAGE: Stainless steel STUBBY POST ASSEMBLY (COMBO) 8"-16": 5" OD Galv. Tube, 10 GA Galv. Sheet. Finished with a baked on powder coating.
	vare package(s) may include extra ecessary for this installation.	a hardware	SHIPPING WEIGHT: 26 LBS.

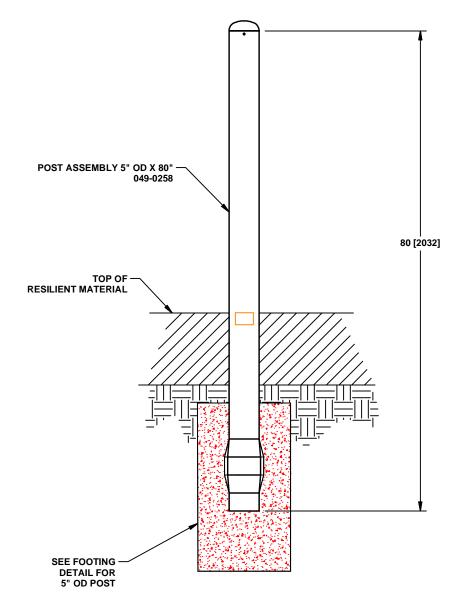
### INSTALLATION INSTRUCTIONS

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 stubby 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 & C.
- 3. Slide the corners of the platforms 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 & C.
- Attach 4 7/8" DIA. PLATE to top of stubby post using 3/8" x 1 1/4" SS button head cap screws and 3/8" SS flat washer. See DETAIL B.
- 6. Level platform and plumb posts.
- 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.

670-0126.doc Description: STUBBY POST (COMBO) 8"-16" REV: 01 PCN: 14-0070 5/9/2014





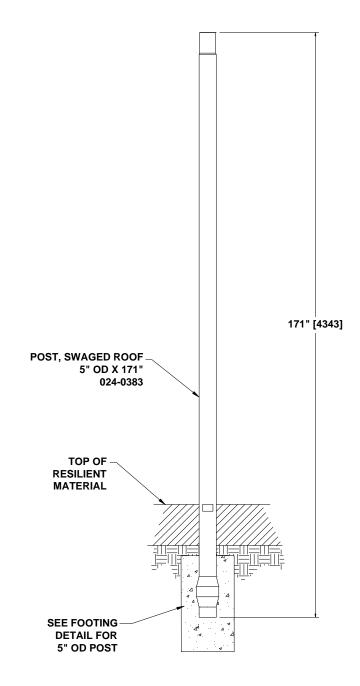


PART NO.	DESCRIPTION	QTY	SPECIFICATIONS POST ASSEMBLY 5" OD X 80": Assembly consisting of 5" OD
	POST ASSEMBLY 5" OD X 80"		x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	Irdware package(s) may include extra ha necessary for this installation.		SHIPPING WEIGHT: 43 LBS.
	-	lig footing	hole as per typical concrete footing drawing,
2. Insert	post into footing hole. Block-u	p and plur	nb post.
3. Pour c	oncrete and let set 2 - 3 days.		
	resilient material in accorda uidelines.	ance to in	stallation guidelines, ASTM standards and

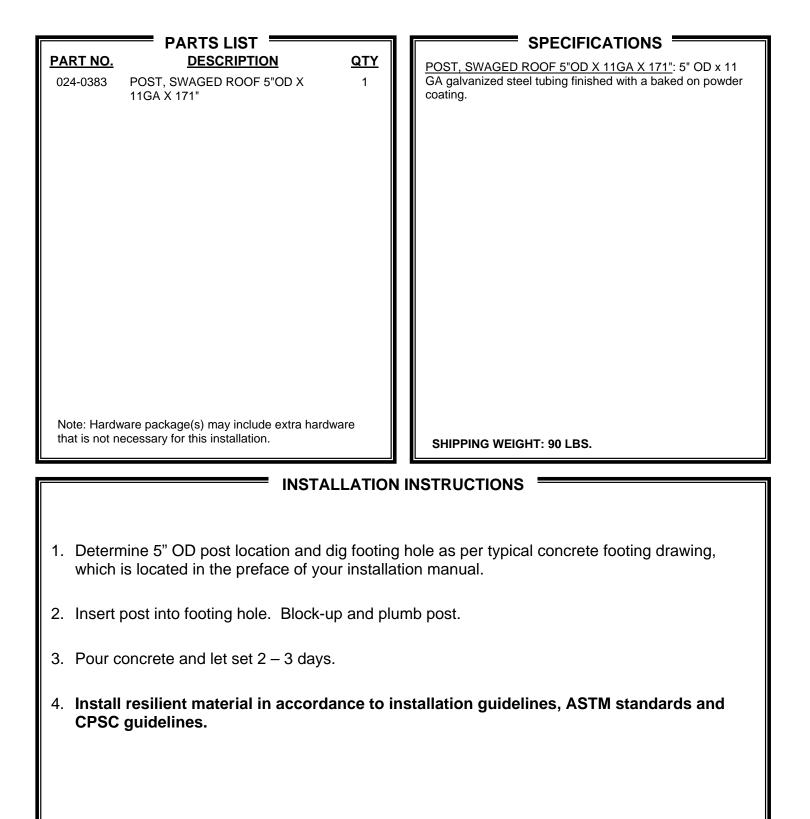
670-0150 POST ASSEMBLY 5" OD X 80" REV: 02 PCN: 16-0257 12/5/2016



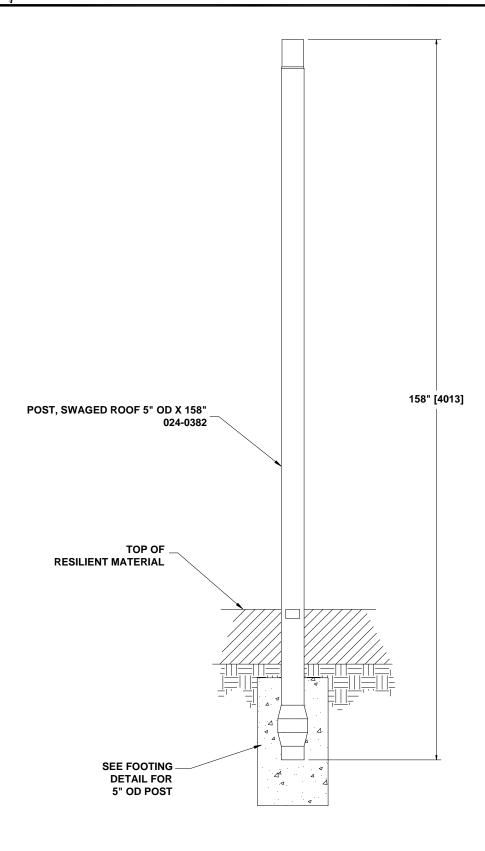




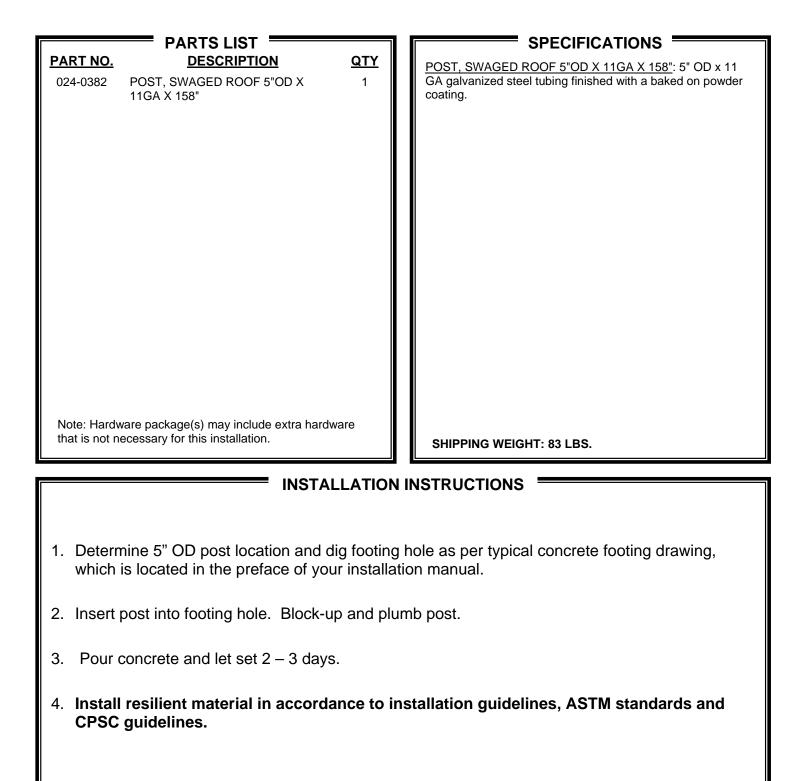
670-0161 SWAGED ROOF POST 5" OD X 171"



670-0161.doc Description: POST, SWAGED ROOF 5" OD X 171" REV: 01 PCN: 10-0339 10/22/2010

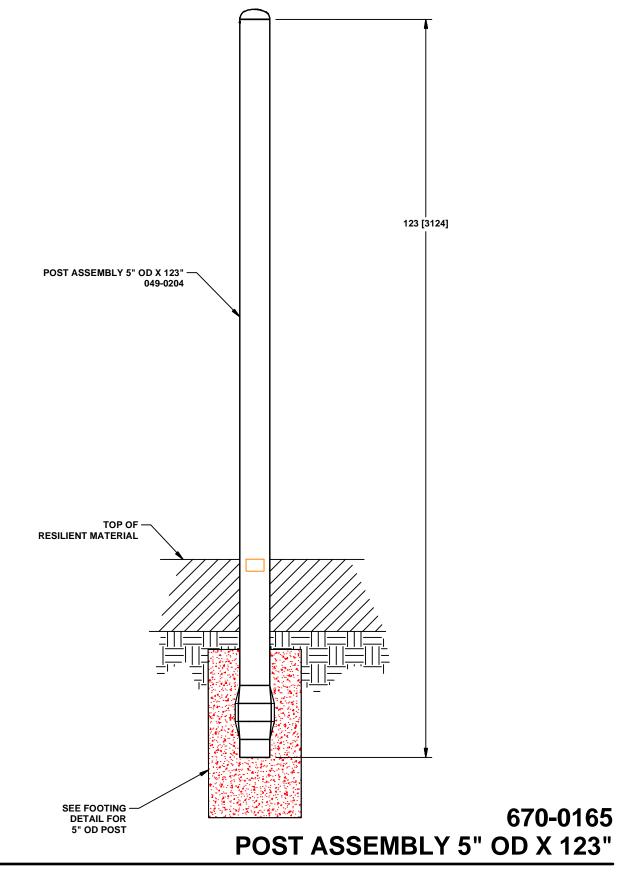


670-0164 SWAGED ROOF POST 5" OD X 158"



670-0164.doc Description: POST, SWAGED ROOF 5" OD X 158" REV: 01 PCN: 10-0339 10/22/2010

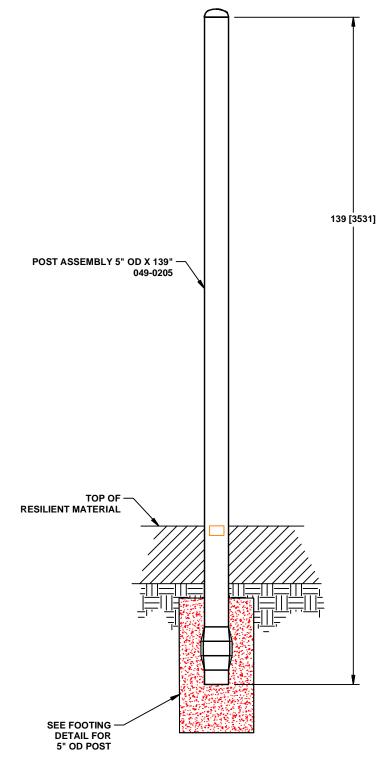




P.O. Box 549 Fond du Lac, WI 54936-0549

PART NO.	DESCRIPTION	QTY	SPECIFICATIONS
PART NO.           049-0204	DESCRIPTION POST ASSEMBLY 5" OD X 123"		POST ASSEMBLY 5" OD X 123": Assembly consisting of 5" OD x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	ardware package(s) may include extra ha necessary for this installation.		
	-	ig footing	g hole as per typical concrete footing drawing,
2. Insert	post into footing hole. Block-u	p and plu	umb post.
3. Pour c	concrete and let set 2 - 3 days.		
	l resilient material in accorda uidelines.	ance to ii	installation guidelines, ASTM standards and



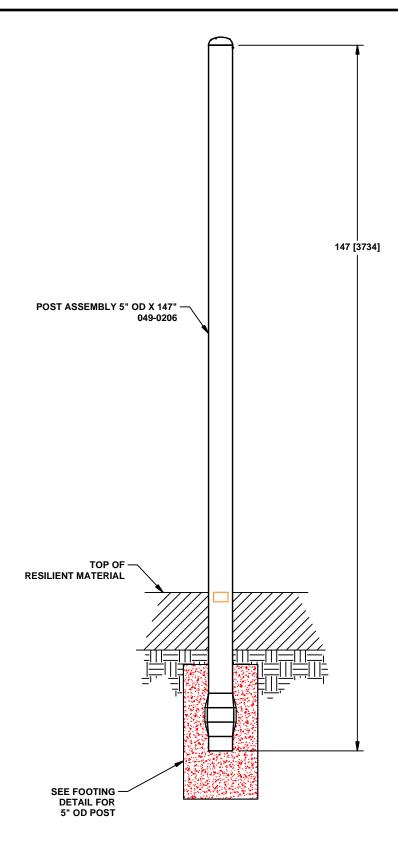


670-0166 POST ASSEMBLY 5" OD X 139"

PART NO.	DESCRIPTION	QTY	SPECIFICATIONS
	DESCRIPTION           POST ASSEMBLY 5" OD X 139"		POST ASSEMBLY 5" OD X 139": Assembly consisting of 5" OD x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	ardware package(s) may include extra h necessary for this installation.		SHIPPING WEIGHT: 74 LBS.
1. Deterr which is	nine 5+OD post location and located in the preface of your	dig footing installatio	hole as per typical concrete footing drawing, n manual.
2. Insert	post into footing hole. Block-	up and plu	imb post.
3. Pour c	concrete and let set 2 - 3 days		
	l resilient material in accord uidelines.	ance to ir	nstallation guidelines, ASTM standards and

670-0166 POST ASSEMBLY 5" OD X 139" REV: 02 PCN: 16-0257 12/5/2016

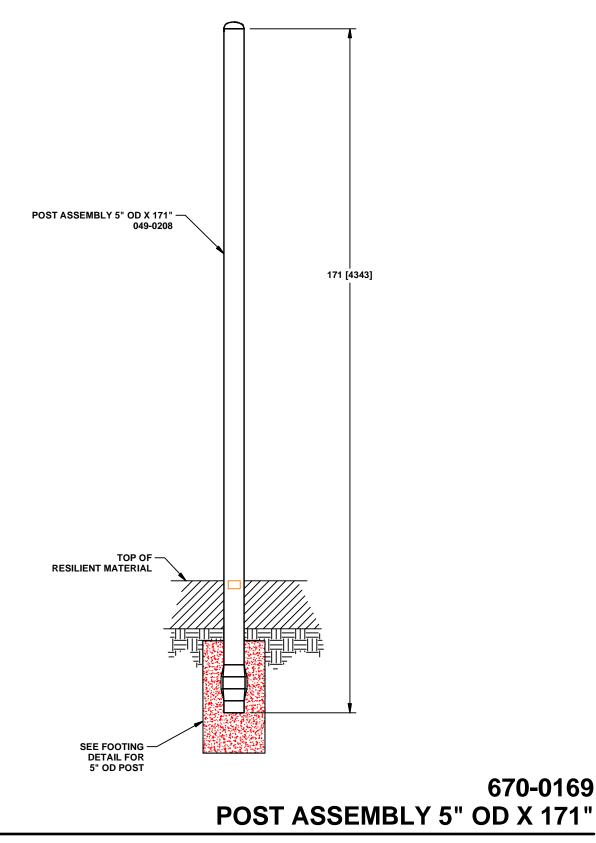




670-0167 POST ASSEMBLY 5" OD X 147"

	PARTS LIST		SPECIFICATIONS
PART NO.	DESCRIPTION	<u>QTY</u>	POST ASSEMBLY 5" OD X 147": Assembly consisting of 5" OD
049-0206	POST ASSEMBLY 5" OD X 147"		x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	ardware package(s) may include extra necessary for this installation.		SHIPPING WEIGHT: 78 LBS.
		<b>FALLATION</b>	
1. Deterr which is	mine 5+OD post location and located in the preface of you	d dig footing Ir installatior	hole as per typical concrete footing drawing, manual.
which is	mine 5+OD post location and located in the preface of you post into footing hole. Block	ir installation	n manual.
which is 2. Insert	located in the preface of you	r installation	n manual.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour c</li><li>4. Install</li></ul>	located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day	r installatior -up and plui /s.	n manual.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour c</li><li>4. Install</li></ul>	located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accor	r installatior -up and plui /s.	n manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour c</li><li>4. Install</li></ul>	located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accor	r installatior -up and plui /s.	n manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour c</li><li>4. Install</li></ul>	located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accor	r installatior -up and plui /s.	n manual. mb post.
<ul><li>which is</li><li>2. Insert</li><li>3. Pour c</li><li>4. Install</li></ul>	located in the preface of you post into footing hole. Block concrete and let set 2 - 3 day I resilient material in accor	r installatior -up and plui /s.	n manual. mb post.

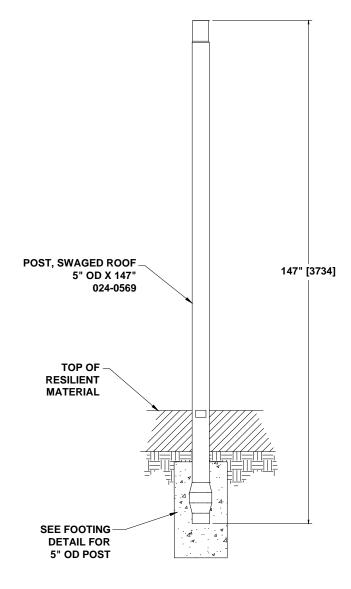




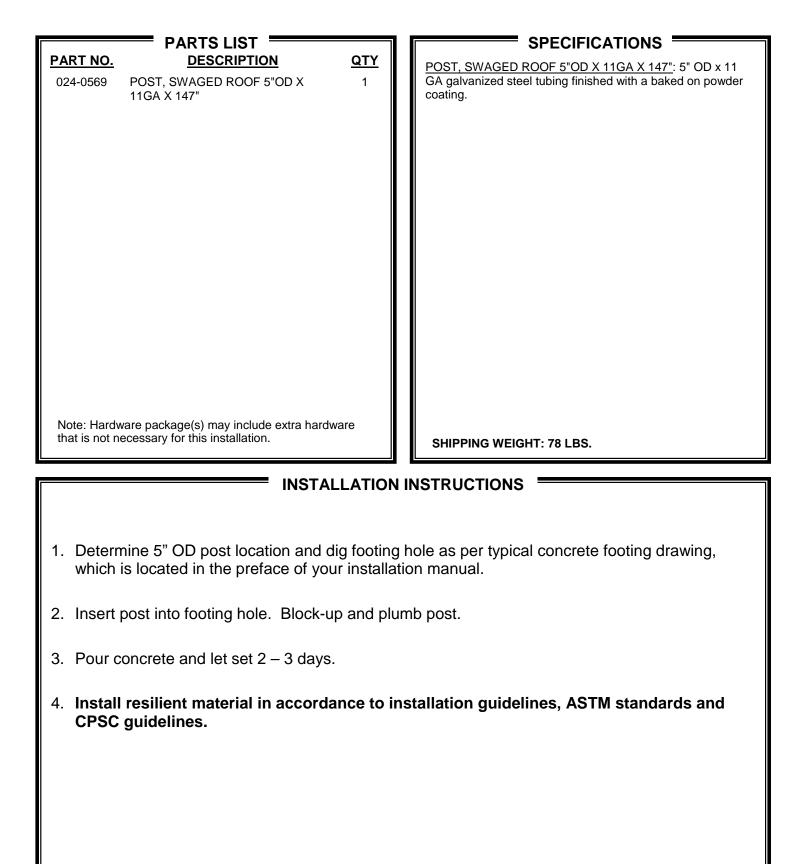
PART NO.	PARTS LIST DESCRIPTION	QTY	SPECIFICATIONS POST ASSEMBLY 5" OD X 171": Assembly consisting of 5" OD
PART NO. 049-0208	DESCRIPTION POST ASSEMBLY 5" OD X 171"		POST ASSEMBLY 5" OD X 171": Assembly consisting of 5" OD x 11 GA galvanized steel tubing, 1/4" wall cast aluminum cap, and 1/8" x 15/32" aluminum drive rivets. Tubing and cap finished with a baked on powder coating.
	ardware package(s) may include extra necessary for this installation.		SHIPPING WEIGHT: 91 LBS.
	INST	<b>FALLATION</b>	INSTRUCTIONS
	mine 5+OD post location and located in the preface of you		hole as per typical concrete footing drawing, manual.
2. Insert	post into footing hole. Block	-up and plur	nb post.
3. Pour c	concrete and let set 2 - 3 day	'S.	
	I resilient material in accor uidelines.	dance to in	stallation guidelines, ASTM standards and

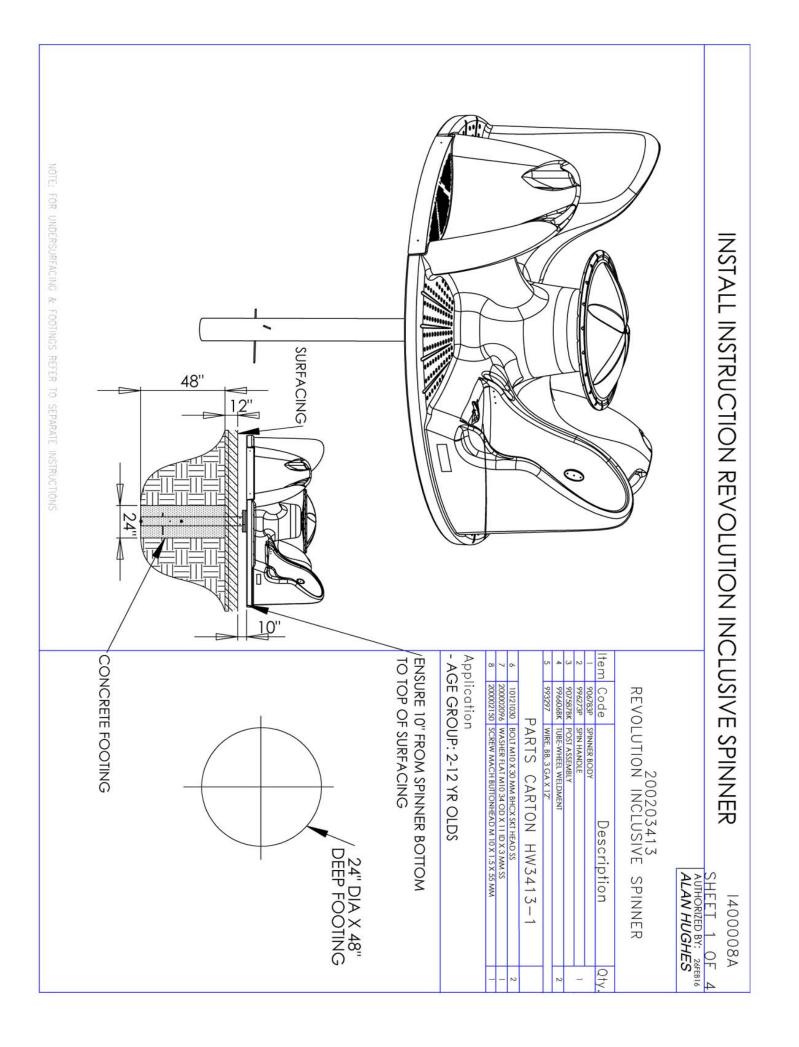
670-0169 POST ASSEMBLY 5" OD X 171" REV: 02 PCN: 16-0257 12/5/2016



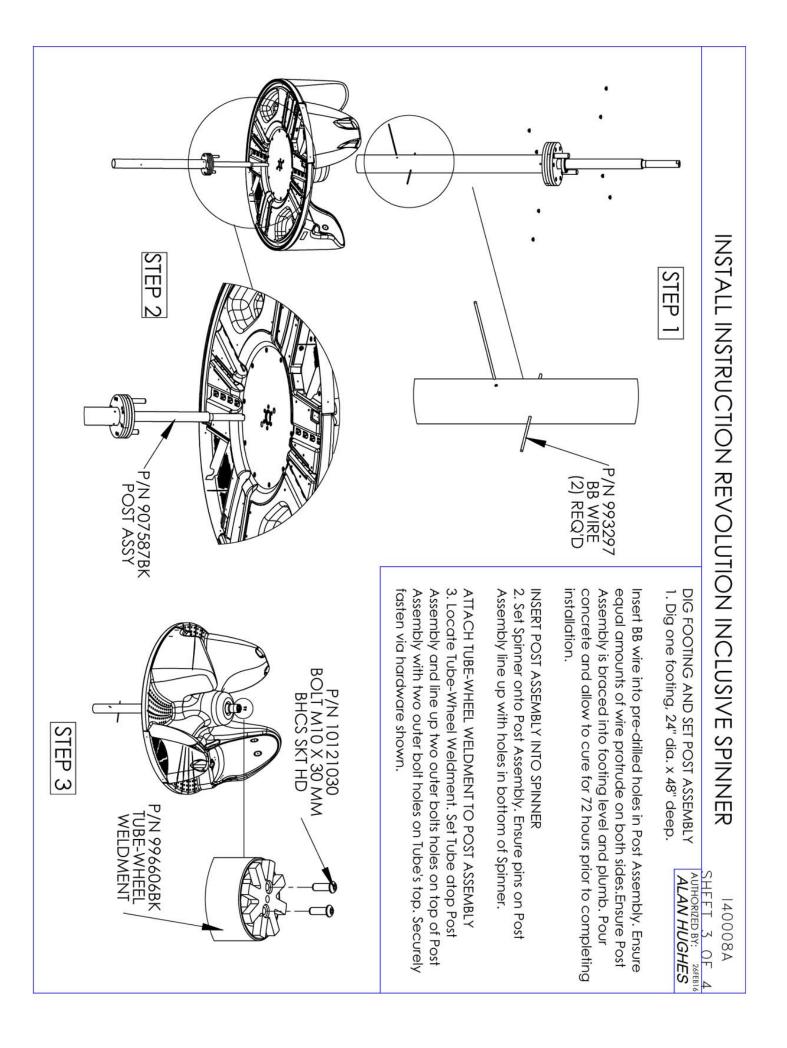


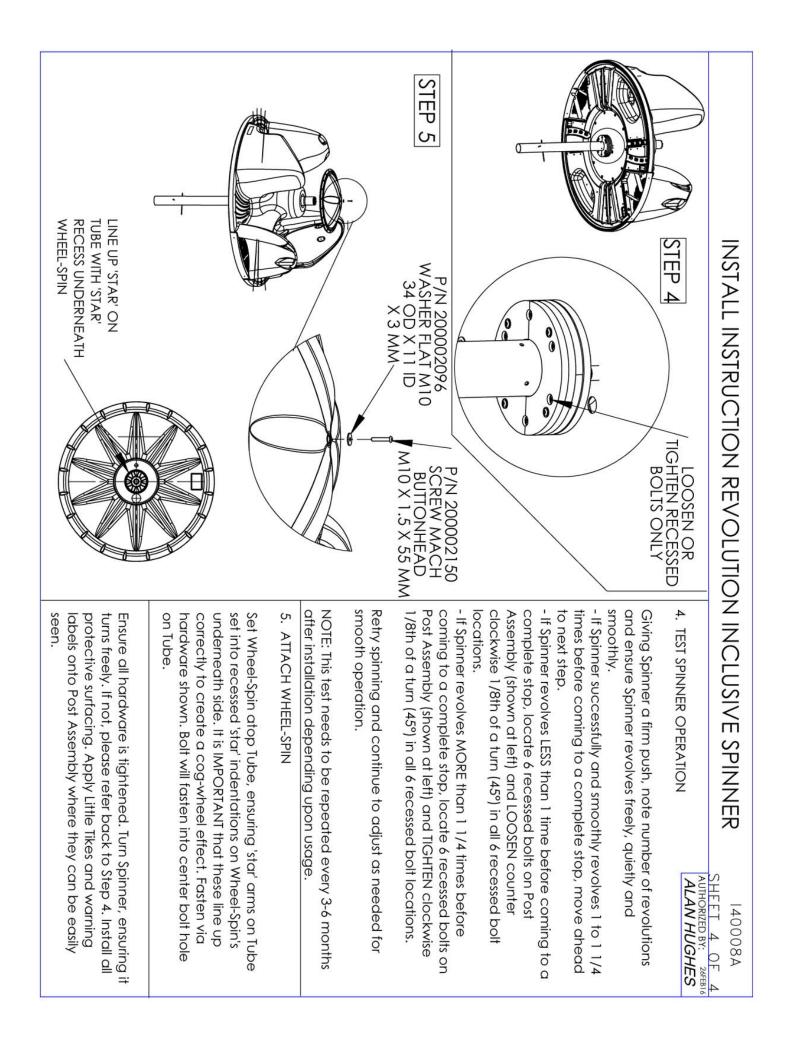
670-0172 POST, SWAGED ROOF 5" OD X 147"





ALL CHILDREN SHOULD BE SUPERVISED WHILE PLAYING ON EQUIPMENT.	The area immediately surrounding and above the play structure must be free of obstructions such as: buildings, trees, other play equipment, etc., and must be kept clear for entries, exits, traffic and falls. Make sure your site has the required surfacing and fall area designated on your Playground Layout Drawings.	All Little Tikes Commercial Play Systems playevents have been designed and engineered to meet all applicable safety guidelines, but if installed improperly, problems may occur such as: protruding hardware, entrapment gaps between 89mm [3.5"] to 229mm [9"], or string entanglements. Any accessible bolt ends that protrude beyond the face of the nut by more than two threads should be trimmed and peened smooth by the installer. Once your installation is complete, always inspect your work. Installation must be done to the manufacturer's assembly manual and applicable safety guidelines and/or standards.	As the owner, it is most important that you are aware of your responsibility for the safe use of your new play equipment. It is necessary to install equipment correctly according to the installation instructions provided and inspect the equipment regularly at intervals specified within the "Maintenance Manual," located in your maintenance kit. During inspection, if any part is found to be damaged or excessively worn, equipment should immediately be put out of service while the part is replaced. Lack of maintenance will result in premature wear, reduced life expectancy and possible failure.	<ul> <li>The site must be checked for adverse or unusual conditions. i.e.</li> <li>1) Exposed, cracked or loose concrete footings.</li> <li>2) Worn, scattered or compressed surface material.</li> <li>3) Exposed roots, rocks or other environmental obstacles that form potential trip hazards.</li> <li>4) Broken glass, refuse, or foreign objects around and on play equipment.</li> <li>5) Poor drainage areas.</li> <li>6) All sites especially those close to existing buildings must be checked for electrical or gas lines and drainage before digging.</li> </ul>	This playevent is designed to suit a level site. Should there be any slopes on the site, care should be taken to accommodate the entry and exit points and to maintain the correct heights.	AUTHORIZED BY: 24FEIG BEFORE STARTING INSTALLATION OF YOUR LITTLE TIKESCOMMERCIAL PRODUCT PLEASE READ INSTRUCTIONS THOROUGHLY	INSTALL INSTRUCTION REVOLUTION INCLUSIVE SPINNER 1400008A SHEET 2 OF 4
---	--	---	---	---	---	---	--



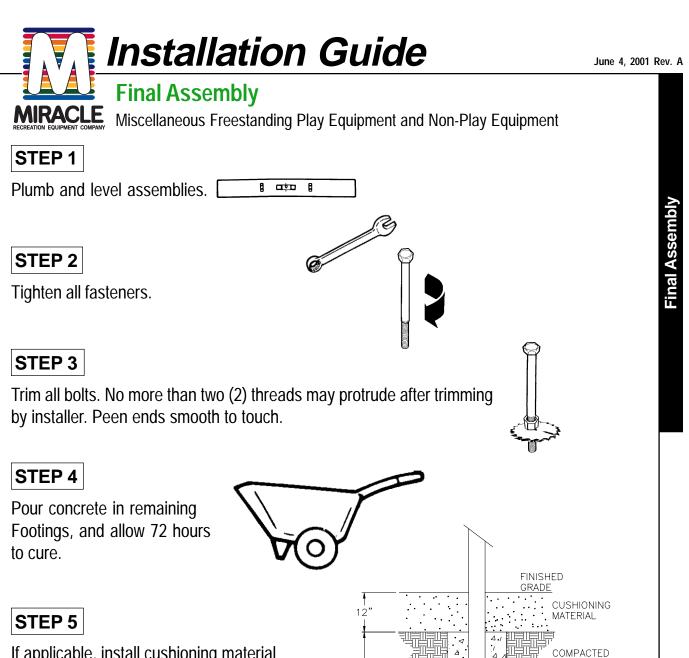


### MANUFACTURER INSTALLATION SPECIFICATIONS

These installation specifications are intended to provide assistance in bidding and to verify correct delivery when materials have been shipped by the manufacturers to the Contractor.

- Burke 30-95966-3A Ramp-connected main structure
- Little Tykes Revolution Spinner
- Miracle P961 Buzzy Bumple Bee Spring Rider
- Playworld Systems Add-A-Bay Arch Swing: Accessible Swing Seat / Belt Swing Seat / Infant-Tot Swing Seat
- Playworld Systems Cozy Cocoon

The Contractor shall refer to the site plan in Contract 7927, 2017 Brittingham Park Accessible Playground for site layout.



If applicable, install cushioning material (protective surfacing) in, around, and beneath areas required for unit.

### STEP 6

If applicable, apply *Age Appropriate, Warning,* and *Manufacturer's I.D.* labels. Refer to *Installations 101.* 

FOOTING

DEPTH

### FINAL STEP

Establish and adhere to a regular maintenance schedule, checking for loose or missing bolts, worn parts, etc.



SOIL

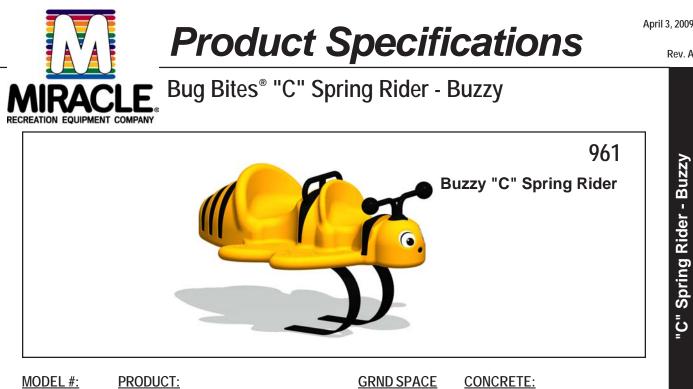
CONCRETE

FOOTING

1

FOOTING

DIA



961

Buzzy "C" Spring Rider

3'-7" x 5'-0"

0.25 cu. yds.

#### **DESCRIPTION:**

This "C" Spring Rider is designed to provide children with an engaging, fun and safe physical activity that stimulates imaginative play while encouraging sharing and cooperation. "C" Spring Riders feature traditional "rocking horse" type movement using two "flat strip" style springs, formed into a "C" shape. Model # 961 is shaped like a bumblebee.

Rider Body:	The rider body shall consist of a <u>Rockite</u> figure supported by a body frame. Wall thickness of molded components shall be $3/16$ " to $1/4$ ". The body frame shall consist of front and/or rear supports constructed of <u>1-1/2</u> " tube and/or of 2" x 2" x 1/4" angle, a cross member constructed of <u>1-1/4</u> " pipe, handholds of 1" (1" O.D.) 15 ga. tube and/or <u>Gator Grip</u> , a cross brace of <u>3/4" x 1" oval tube</u> and <u>Gator Grip</u> , a mount of 1/4" x 1-1/2" flat or 1/4" plate, and a base and gussets constructed of 7 ga. sheet, all solid <u>welded</u> .
"C" Spring:	The "C" springs shall be constructed of 3/8" or 7/16" spring steel, 4" wide by approximately 41-1/2" long, bent 180 degrees to form a large "C".
Pinch Plate:	Pinch Plates shall be constructed of 1/4" flat sheet.
Base Weldment:	Base Weldments shall comprise an anchor plate constructed of 1/8" x 2" flat sheet, a bracket of 7 ga. sheet, and a center tube constructed of <u>5" tube</u> , all solid <u>welded</u> .
Fasteners:	All hardware shall be Fastener style A.
Finish:	The <u>Rockite</u> rider bodies shall have color molded in. Buzzy shall have molded in color for the stripes and molded in decals for the eyes. Handholds shall have a galvanized finish. The "C" springs shall be finished in <u>Mira-Cote</u> ™.
Consu	It the Glossary of Technical Data for Materials, Processes and Finishes of the underlined items.

April 3, 2009

Rev. A

961





Assembly View

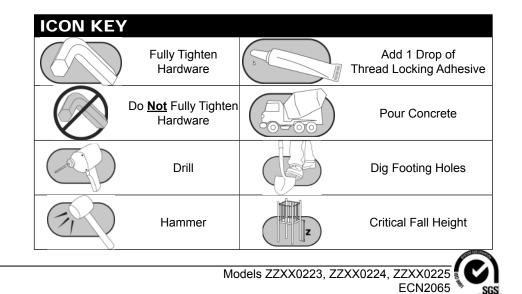
Model Number	Top Rail Height
ZZXX0223	7 ft. (2135 mm)
ZZXX0224	8 ft. (2440 mm)
ZZXX0225	10 ft. (3050 mm)

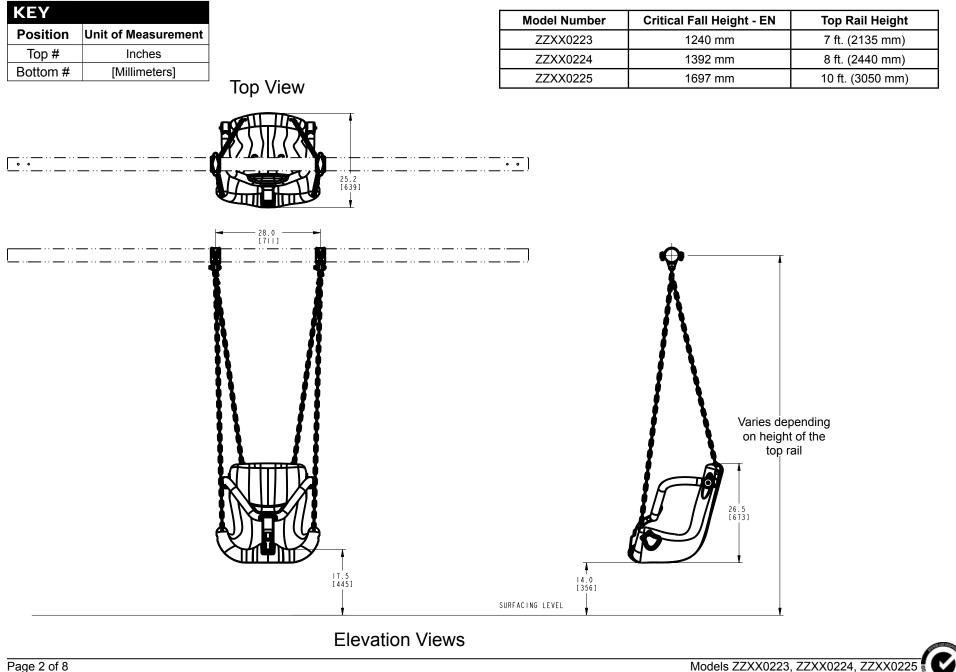
# **Installation Instructions**

Playworld Systems® Models XX0223, XX0224, XX0225 Accessible Swing Seat w/ Galvanized Chain to 7 ft (2134 mm), 8 ft. (2438 mm), and 10 ft. (3048) Top Rail

### **Installation Preparation**

Recommended Crew:	One (1) adult
	0.5 man hour
Use Zone:	
User Group Age (years	s): ASTM/CSA: 2-12, EN: 2-14

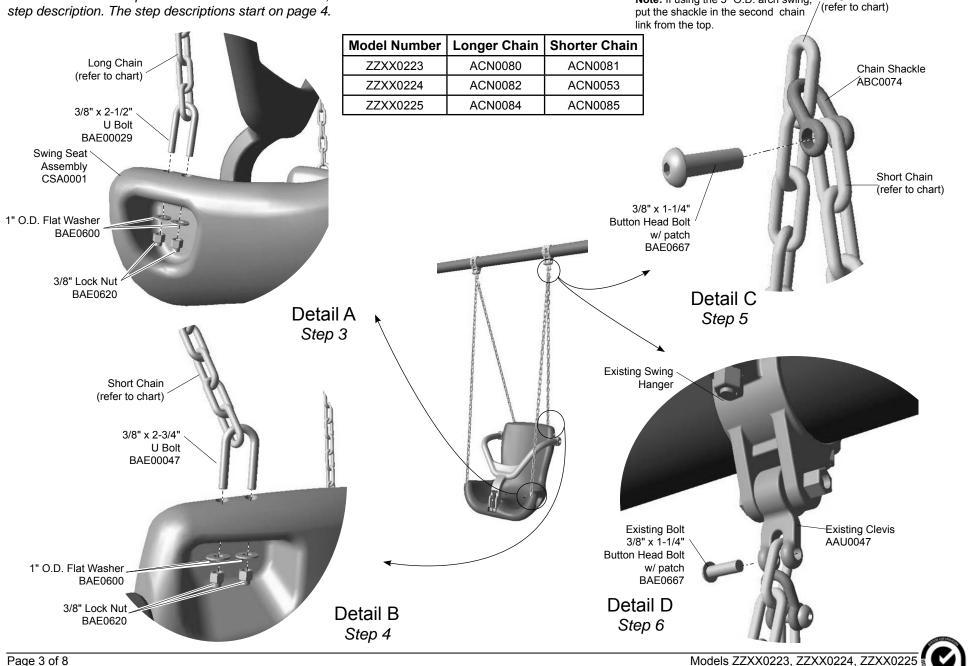




ECN2065

SGS

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.



Long Chain

ECN2065

SGS

Note: If using the 5" O.D. arch swing,

\_\_\_Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

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

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

\_Step 2: Separate and identify all components and hardware.

#### Attach the longer chain assembly to the accessible swing seat.

**\_\_\_\_Step 3:** See **Detail A**. Select the accessible swing seat, the longer chain, and the appropriate hardware. There is (1) one connection per chain, (2) two total connections. Insert a U-bolt through the chain and into the openings on the top of each arm rest. Attach as shown.

#### Attach the shorter chain assembly to the accessible swing seat.

**\_\_\_Step 4**: See **Detail B**. Select the shorter chain, and the appropriate hardware. There is (1) one connection per chain, (2) two total connections. Insert a U-bolt through the chain and into the openings on the top of the seat back. Attach as shown.

#### Connect the chains.

**\_\_\_\_Step 5:** See **Detail C**. Select the swing seat assembly, (2) two shackles, and the appropriate hardware. There are (2) two connections. Thread a shackle through the last link of one of the longer "front" chains. Insert the last link of the shorter chain into the open end of the shackle. Insert a bolt though the unthreaded side of the shackle, *through the last link* of the shorter chain, and thread into the opposite side of the shackle. Repeat for the other set of chains.

#### Attach the seat assembly to the swing hangers.

**\_\_\_\_\_Step 6:** See **Detail D**. There are (2) two connections. Remove the 1-1/4" bolt from the swing hanger clevis with the included hex wrench. Select the swing seat and place the last link of the longer chain into the open end of the clevis. Reinsert the bolt through the unthreaded side of the clevis, *through* the chain link, and thread into the opposite side of the clevis.

#### Final Details.

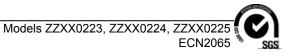
**\_\_\_Step 7:** Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

#### **Torque Specifications:**

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

**Important Note:** The vertical distance between an occupied seat and the protective surface should be at least 14" (356 mm). Remove any excess chain.

**Usage instructions:** Place child in swing and pull the harness down around child. Pull the rubber latch up until the hole aligns with the protrusion on the harness. Press the rubber latch onto the harness to secure. To release the latch, pull the rubber up and out until the harness is released. Do **NOT** attempt to pull harness out of swing seat without disengaging the latch first.



#### ZZXX0223 - ACCESSIBLE SWING SEAT w/ GALVANIZED CHAIN TO A 7 ft. (2134 mm) TOP RAIL

#### ZZXX0225 - ACCESSIBLE SWING SEAT w/ GALVANIZED CHAIN TO A 10 ft. (3048 mm) TOP RAIL

PART NO.	DESCRIPTION	QTY.	PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2	ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0080	CHAIN - 57.00" 4/0 GALVANIZED	2	ACN0084	CHAIN - 93.00" 4/0 GALVANIZED	2
ACN0081	CHAIN - 40.00" 4/0 GALVANIZED	2	ACN0085	CHAIN - 75.00" 4/0 GALVANIZED	2
BAE0029	BOLT - 3/8"-16 x 7/8" x 2-1/2" U	2	BAE0029	BOLT - 3/8"-16 x 7/8" x 2-1/2" U	2
BAE0047	BOLT - 3/8"-16 x 7/8" x 2-3/4" U	2	BAE0047	BOLT - 3/8"-16 x 7/8" x 2-3/4" U	2
BAE0600	WASHER - 1" O.D. FLAT	8	BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	8	BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	8
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2	BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
CSA0001	ASSY - ACCESSIBLE SWING SEAT	1	CSA0001	ASSY - ACCESSIBLE SWING SEAT	1

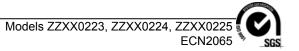
#### ZZXX0224 - ACCESSIBLE SWING SEAT w/ GALVANIZED CHAIN TO A 8 ft. (2438 mm) TOP RAIL

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0053	CHAIN - 52" 4/0 GALVANIZED	2
ACN0082	CHAIN - 69.00" 4/0 GALVANIZED	2
BAE0029	BOLT - 3/8"-16 x 7/8" x 2-1/2" U	2
BAE0047	BOLT - 3/8"-16 x 7/8" x 2-3/4" U	2
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	8
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
CSA0001	ASSY - ACCESSIBLE SWING SEAT	1





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#### Fasteners

Inspect for loose fasteners.

Tightening torque specifications are:

Bolts and Nuts: Snug tighten and tighten an additional one-half turn.

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

#### **Plastic Parts**

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

#### Castings

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

#### Finish

· Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with colormatching paint and allow to dry. Recoat area with colormatching paint if required. Drying time is approximately 8 hours between coats.

To repair the coating, contact the Playworld Systems' Customer Service Department for a coating repair touchup kit.

#### **Replacement Parts**

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

### **Equipment Maintenance**

Playworld Systems<sup>®</sup> Model XX0223, XX0224, XX0225 Accessable Swing Seat w/ Galvanized Chain to 7 ft (2134 mm), 8 ft. (2438 mm), and 10 ft. (3048) Top Rail







### **Inspection Form**

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

# **Preventive Maintenance**

... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ection Date	Date Repairs Completed	
Inspect plastic parts for damage.		Medium				Inspection Codes
Inspect clamps for tightness and damage.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect for loose, missing, worn, or broken fasteners.		High				
Inspect footing to insure support is secure and footing is not damage	d.	Low				
Inspect surfacing to insure proper depth and distribution.		High				
Inspector: Name (Please Print)	Signature:				Da	ate://

#### MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date
Repairer: Name (Please Print)	Signature:	Date:/_	_/

ECN2065







### Assembly View

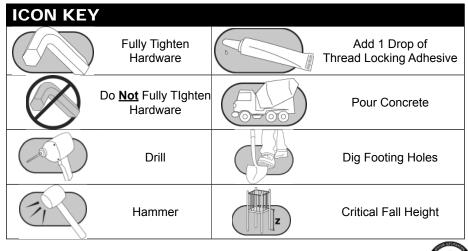
Refer to the Elevation View for the specific Critical Fall Height for the component.

### **Installation Instructions**

Playworld Systems<sup>®</sup> Models XX0260, XX0261, & XX0324 Belt Seat with Swing Chain

### **Installation Preparation**

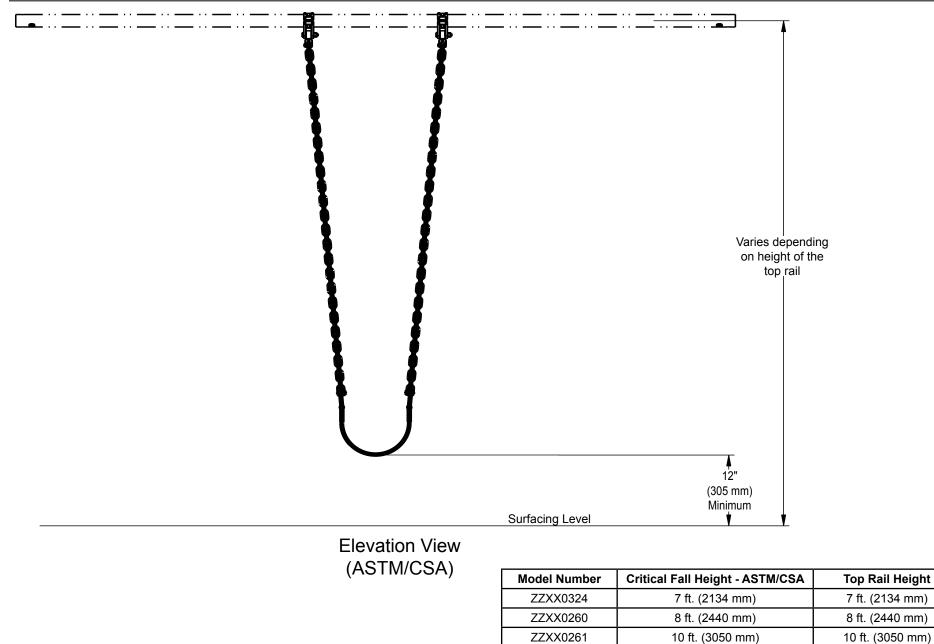
Recommended Crew:	One (1) adult
	0.25 hour
Use Zone:	
User Group Age (year	s):ASTM/CSA: 2-12, EN: 2-14



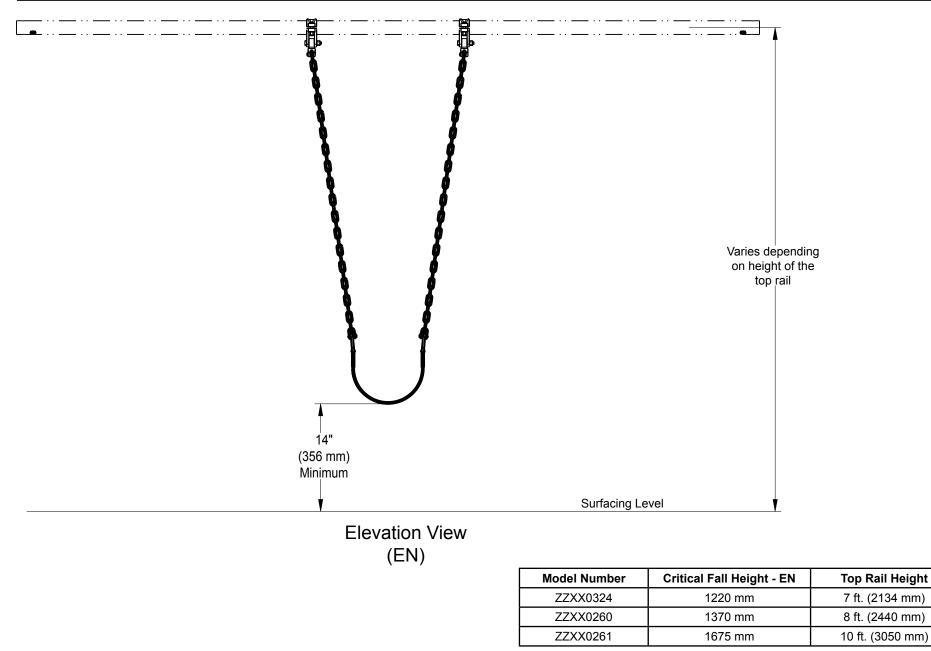
Models XX0260, XX0261, & XX0324



ECN2147

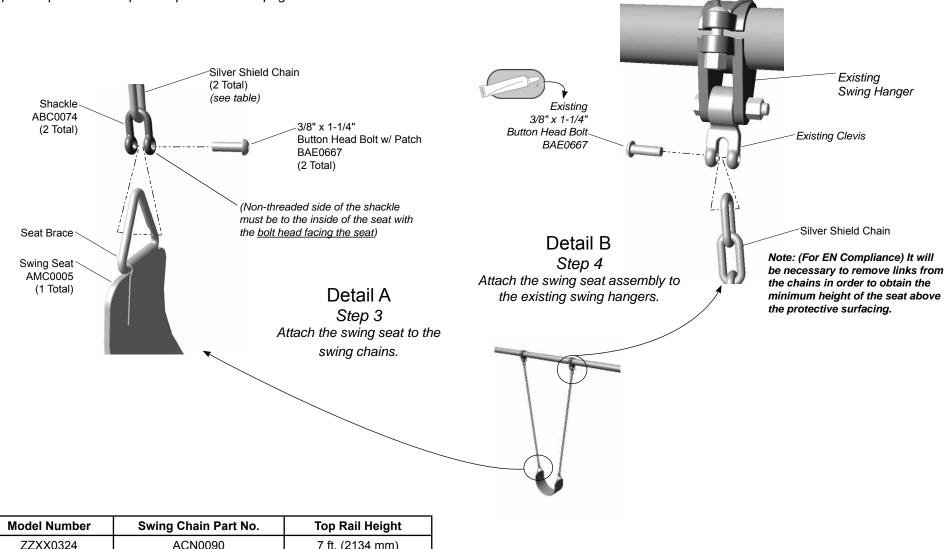








Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



incaci italiicoi	owing onain r art no.	rop Run Hoight
ZZXX0324	ACN0090	7 ft. (2134 mm)
ZZXX0260	ACN0091	8 ft. (2440 mm)
ZZXX0261	ACN0092	10 ft. (3050 mm)

**Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

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

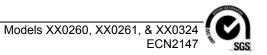
Step 2: Separate and identify all components and hardware.

**Step 3:** Attach the swing seat to the swing chains. See **Detail A**. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat.

Step 4: Attach the swing seat assembly to the existing swing hangers. See Detail B. Remove the 1-1/4" bolt from the swing hanger clevis with the included wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown. Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side. Note: (For EN Compliance) It will be necessary to remove links from the chains in order to obtain the minimum height of the seat above the protective surfacing.

#### Final Details.

**Step 5:** Fully tighten all fasteners according to tightening torque specifications. **Torque specifications** - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.



#### ZZXX0324 - BELT SEAT WITH SWING CHAIN

#### - 7 ft. (2134 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CNCTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0090	CHAIN - 53.71" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1

### ZZXX0260 - BELT SEAT WITH SWING CHAIN

#### - 8 ft. (2438 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	) 2
ACN0091	CHAIN - 65.11" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1

### ZZXX0261 - BELT SEAT WITH SWING CHAIN

#### - 10 ft. (3048 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0092	CHAIN - 89.01" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1



SGS



#### Swing Seat

• Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

#### Fasteners

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

#### Finish

• Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

#### Surfacing

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

#### **Replacement Parts**

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

### **Equipment Maintenance**

Playworld Systems<sup>®</sup> Models XX0324, XX0260 & XX0261 Belt Seat with Swing Chain







### **Inspection Form**

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

# Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ection Date	Date Repairs Completed	
Inspect chain and swing seat for damage.		Medium				Inspection Codes
Inspect surfacing to insure proper depth and distribution.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect for loose, missing, worn, or broken fasteners.		High				
	Signature:				Da	ite: / /

#### MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date	
epairer: Name (Please Print)	Signature:	Date:	/ /	





Playworld Systems<sup>®</sup> Models XX0265, XX0266, & XX0325 Infant Swing Seat with Swing Chain

### **Installation Preparation**

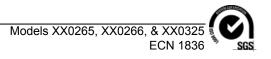
Recommended Crew:	One (1) adult
	0.25 hour
Use Zone:	
User Group:	Ages 2 - 5 years

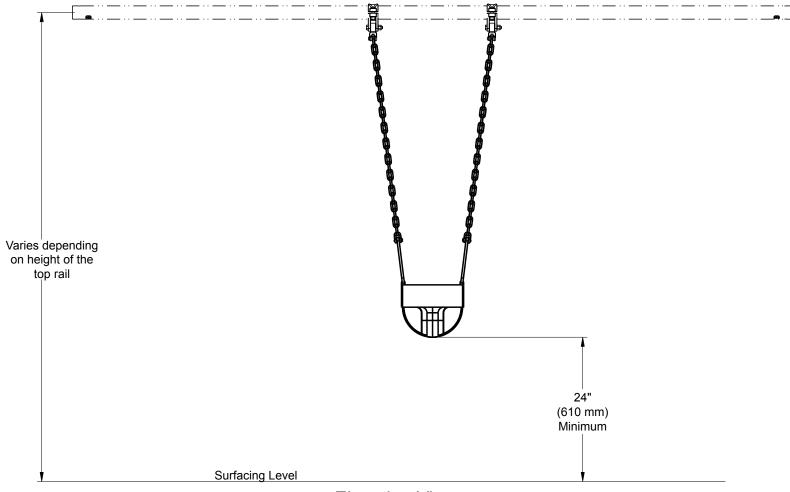
### Assembly View

Refer to the Elevation View for the specific Critical Fall Height for the component.

Model Number	Top Rail Height
ZZXX0325	7 ft. (2134 mm)
ZZXX0265	8 ft. (2440 mm)
ZZXX0266	10 ft. (3050 mm)





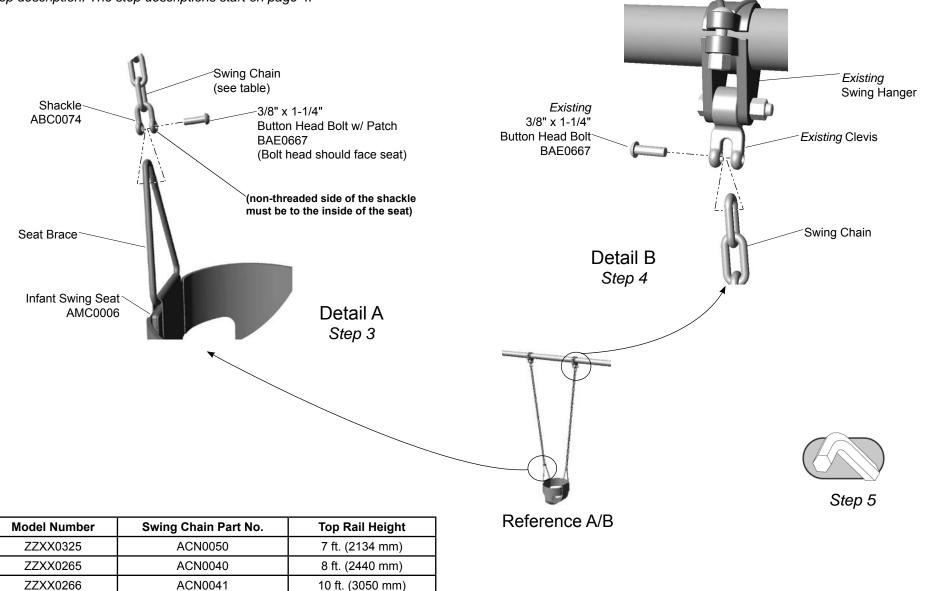


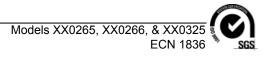
**Elevation View** 

Model Number	Critical Fall Height - EN	Top Rail Height		
ZZXX0325	1345 mm	7 ft. (2134 mm)		
ZZXX0265	1525 mm	8 ft. (2440 mm)		
ZZXX0266	1830 mm	10 ft. (3050 mm)		

SGS

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.





\_\_\_Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

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

\_Step 2: Separate and identify all components and hardware.

#### Attach the swing seat to the swing chains.

**\_\_\_\_\_Step 3:** Attach the swing seat to the swing chains. See **Detail A**. Select the swing seat, and (2) two of the following: bolts, chains, and shackles. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat.

#### Attach the swing seat assembly to the existing swing hangers.

**\_\_\_\_\_Step 4:** Attach the swing seat assembly to the existing swing hangers. See **Detail B**. Remove the 1-1/4" bolt from the swing hanger clevis with the included hex key wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown.

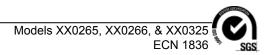
Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side.

**Important Note:** The vertical distance between an <u>occupied</u> seat and the protective surface shall be no less than 24" (610 mm). Remove any excess chain.

#### Final Details.

**\_\_Step 5:** Fully tighten all fasteners according to tightening torque specifications.

**Torque specifications** - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.



#### ZZXX0325 - INFANT SWING SEAT WITH SWING CHAIN

- 7 ft. (2134 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CNECTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0050	CHAIN - 36" 4/0 Swing	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1

#### ZZXX0265 - INFANT SWING SEAT WITH SWING CHAIN - 8 ft. (2438 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0040	CHAIN - 47" 4/0 Swing	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1

### ZZXX0266 - INFANT SWING SEAT WITH SWING CHAIN

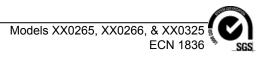
- 10 ft. (3048 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	) 2
ACN0041	CHAIN - 72" 4/0 Swing	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1





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#### Swing Seat

 Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

#### Fasteners

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

#### Finish

• Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

#### Surfacing

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

#### **Replacement Parts**

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

### Equipment Maintenance

Playworld Systems<sup>®</sup> Models XX0265, XX0266, & XX0325 Infant Swing Seat with Swing Chain







### **Inspection Form**

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

# Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ection Date	Date Repairs Completed	
Inspect chain and swing seat for damage.		Medium				Inspection Codes
Inspect surfacing to insure proper depth and distribution.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect for loose, missing, worn, or broken fasteners.		High				]
				0		]
Inspector: Name (Please Print)	Signature:	-	-	-	Da	- ate: / /

#### MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

 Repairer:
 Name (Please Print)
 Signature:

Date:



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

#### **Installation Guidelines**

• Identify all parts and thoroughly read the assembly instructions before beginning construction.

• Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and noencroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

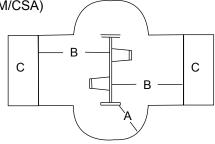
#### (ASTM / CSA)

• For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. The use zone on the sides of the swing should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

• For enclosed infant swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the measurement from the pivot point to the swing seat surface measured from a point directly beneath the pivot on the supporting structure. The use zone on the ends of the swing (support structure) should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

#### Belt/Rigid Seat Swing Zones (ASTM/CSA)

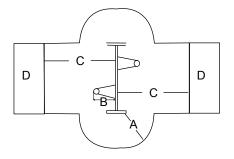
- **A** = Side Use Zone 72 in. (1829 mm)
- B = End Use Zone Height of Pivot Point from Surfacing x 2 Both Sides of Top Rail
- C = No-encroachment Zone 72 in. (1829 mm)



• The use zone on either end of the swing (72 inches [1829 mm]) may be overlapped by the use zone on either end of the another swing (72 inches [1829 mm]). Swing zones on either side of the top rail may **not** be overlapped by the use zones of other play equipment.

#### Infant Seat Swing Zones

- A = Side Use Zone 72 in. (1829 mm)
- **B** = Distance from Pivot Point to Swing Seat Surface
- C = End Use Zone: B x 2 Both Sides of Top Rail
- D = No-encroachment Zone 72 in. (1829 mm)





#### (EN)

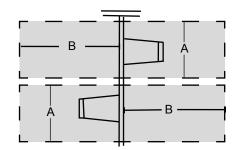
• For areas conforming to the EN-1176 Standard, the impact area shall be determined by calculating the horizontal distance where the swing seat is at an 60° arc and adding the appropriate amount of distance based upon the type of protective surfacing. This distance shall be covered by protective surfacing on both sides of the top rail. The protective surfacing shall be appropriate for the maximum fall height of the swing. There is no difference in the calculation based on the type of swing seat.

The impact area on both sides of top rail =  $(0.867 \times \text{Distance from pivot point}) + \underline{either}$  1750 mm if unitary surfacing <u>or</u> 2250 mm if loose-fill surfacing is used. There shall be a minimum corridor of 1750 mm centered on each swing seat for the length of the impact area.

#### **Use Zones - EN Compliance**

- A = Width of the corridor centered on the swing seat 1750 mm
- **B** = Length of the use zone on both sides of the top rail (8ft) Tot Seats: 3290 mm for unitary surfaced areas

or 3790 mm for areas covered with loose fill surfacing. Belt / Rigid Seats: 3510 mm for unitary surfaced areas or 4010 mm for areas covered with loose fill surfacing



• Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.

• Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.

• After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.

• Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.

• Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.

• Insure that hard surface warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.

• **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.

• The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, <u>A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment</u>. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

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

#### Maintenance

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

#### **Supervision Guidelines**

• Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.

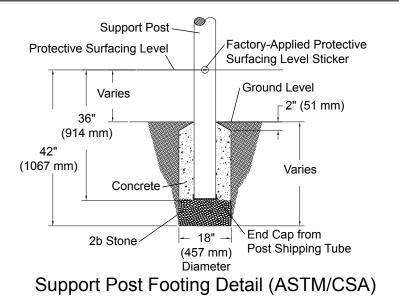
• Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.

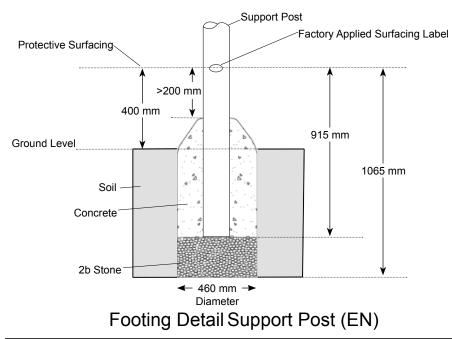
• It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.

• Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.

• Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.

• Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.





#### FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete. *Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
   For example:
  - If local soil is loose or unstable, a larger footing may be required.

- If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.

- · Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

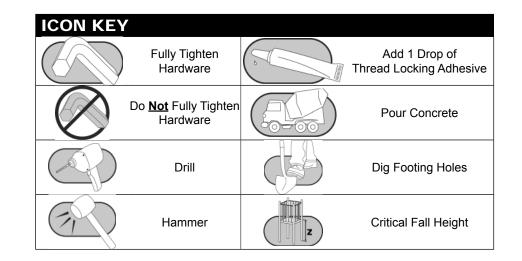




Playworld Systems<sup>®</sup> Model XX0287 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing 8 ft. (2438 mm) Top Rail

### **Installation Preparation**

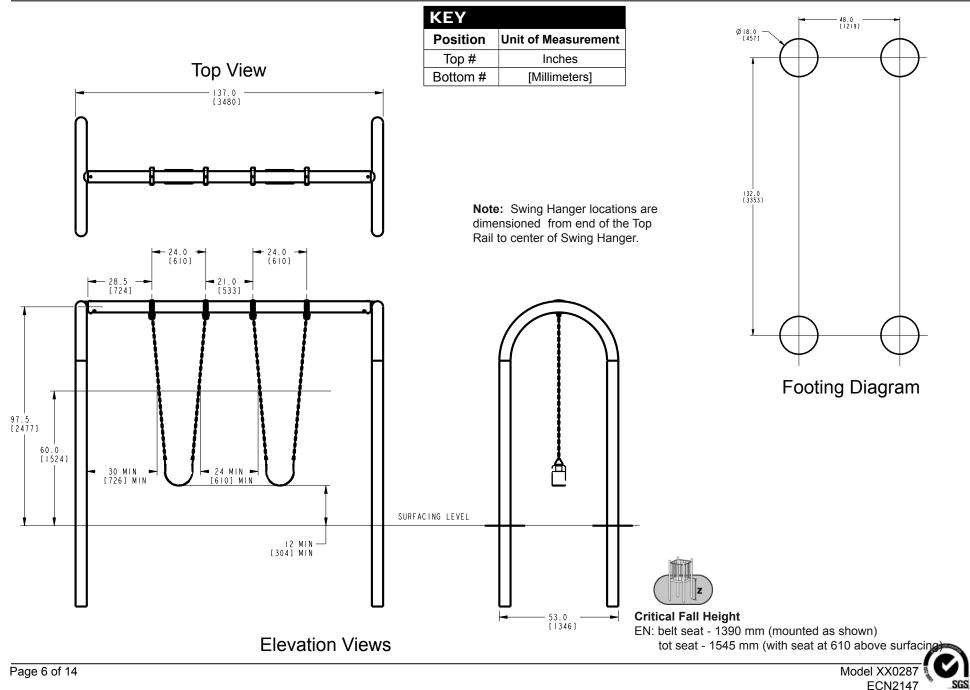
Recommended Crew:	Four (4) adults
Installation Time:	3 man-hours
Concrete Required:	0.48 cubic yard (0,37 cubic meters)
Use Zone:	Refer to Master Drawing
User Group Age (years):	

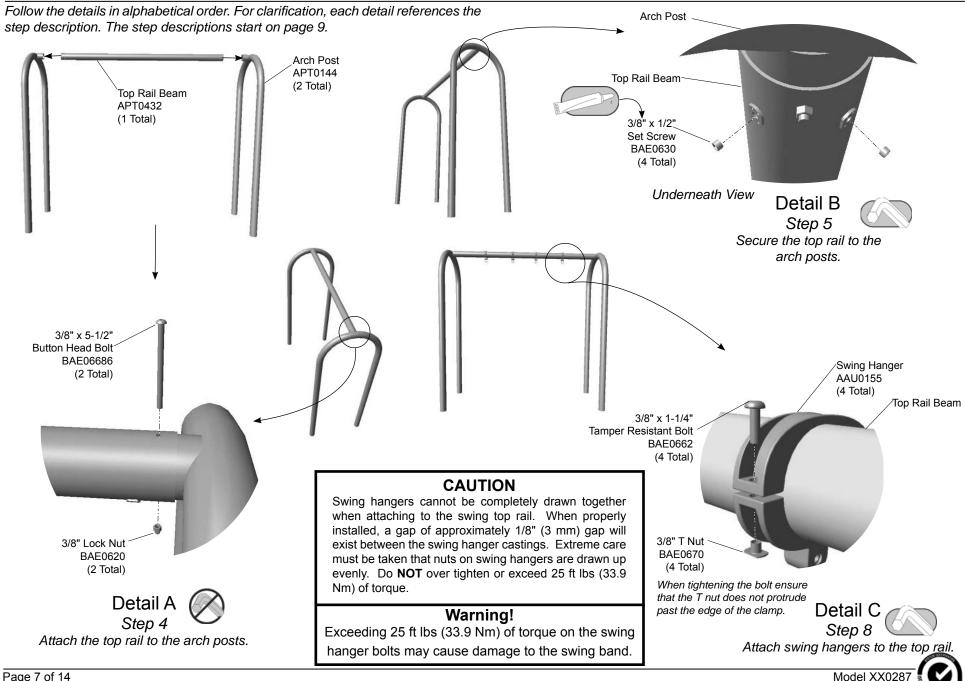




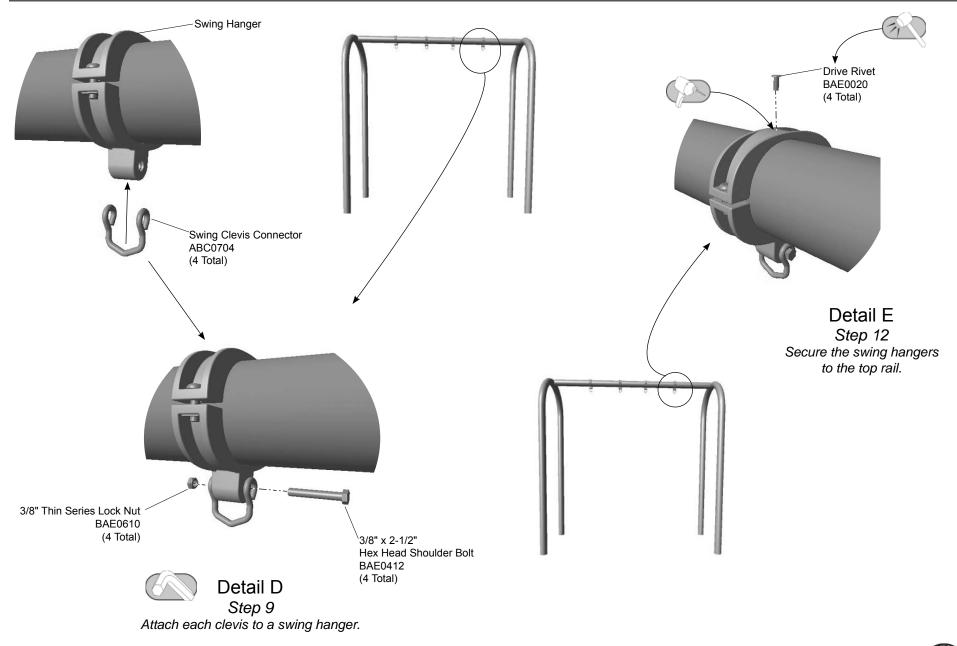


Assembly View (representative model)





ECN2147



Model XX0287 ECN2147

SGS

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**Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

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

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

Step 2: Separate and identify all components and hardware.

Step 3: Prepare footings as shown in the Support Post Details on Page 4.

#### Assemble the swing frame.

**Step 4:** Attach the top rail to the arch support posts. See **Detail A**. Slide each end of the top rail into a post stub and align holes. Insert each bolt through the *top* hole in the post stub, through the top rail, out the bottom side of the post stub, and thread into a lock nut.

**Step 5:** Secure the top rail to the arch posts. See **Detail B**. Apply a drop of loctite to the set screw threads and thread each screw into a hole on the underside of the post stub. Fully tighten connections according to tightening torque specifications.

#### **Torque Specifications:**

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

### Position the swing frame.

**Step 6:** Place the swing frame into the footings. Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) as measured from top of the protective surfacing material level to the bottom of the top rail. Fully tighten all bolts in accordance with tightening torque installation instructions. Block and brace for concrete.

**Step 7:** Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Plumb and level the component. Block and brace for concrete. Allow concrete to harden for 72 hours before proceeding with **Step 8**.

#### Attach swing hangers to the top rail.

**Step 8:** Attach swing hangers to the top rail. See **Detail C**. Close the swing hangers around the top rail and attach as shown. Ensure hangers are properly spaced and positioned on top rail (See **Elevation View**). There is a ridge on the underside of the bottom band to keep the T nut from rotating. **When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp**. **Note:** Please read **CAUTION** before fully tightening the connections.

**Important Note:** Swing hangers should be positioned a minimum of 20" (508 mm) apart. Additionally, the horizontal distance between the vertical support and the swing shall be no less than 30 in. (760 mm) when measured at 60 in. (1524 mm) from the level of protective surfacing. Please refer to the USCPSC Handbook for Public Playground Safety for proper placement.

**Step 9:** Attach each clevis to a swing hanger. See **Detail D**. Position each clevis over the bottom hanger bushing and align holes. Insert a hex head bolt through the clevis eye, through the hanger bushing, through the other clevis eye and secure with a thin series lock nut.

**Important Note:** Tighten the thin series lock nut on shoulder bolt until the clevis binds on the swing hanger casting. Then loosen the thin series lock nut approximately 1/4 turn until the swing clevis moves freely. Insure the bolt threads are fully engaged into the nut's locking device.

**Note:** Swing clevises will need to be removed from swing hangers to install selected swing seat.

### **Final Details**

**Step 10:** See Swing Seat Installation Instruction sheet for swing seat attachment. Swing seats are ordered separately.

**Step 11:** Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

#### **Torque Specifications:**

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



**Step 12:** Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

**Note:** This step should be executed after structure has been assembled and properly footed.

**Step 13:** For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the equipment at eye level.



#### XX0287 - 5 in. O.D. 2-UNIT ALUMINUM ARCH SWING 8 ft. (2438 mm) TOP RAIL

PART NO.	DESCRIPTION	QTY.
AAU0155	HANGER - 5" SWING	4
ABC0704	CONNECTOR - SWING CLEVIS	4
APT0144	POST - 5" O.D. x 133-1/2" ALUMINUM ARCH SUPPORT	2
APT0432	BEAM - 5" x 126" ARCH SWING TOP RAIL	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0412	BOLT - 3/8"-16 x 2 1/2" HEX HEAD SHOULDER	4
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	2
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE06686	BOLT - 3/8"-16 x 5.50" BUTTON HEAD - SS	2
BAE0670	T-NUT - 3/8"-16 x 7/16" - SS	4
BAE0905	WRENCH - 3/16" SHORT HEX KEY	1
BAE0915	BIT - 3/8" TAMPER RESISTANT	1
BAE0922	TOOL - TT 45 L WRENCH	1
ALB0025	LABEL - AGE APPROPRIATE	1





#### FINAL INSPECTION

- Playworld Systems<sup>®</sup> insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard for your area, appropriate for the fall height of each structure.
- Playworld Systems<sup>®</sup> strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently. Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
  - Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
  - Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
  - Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
  - Clean dried concrete off of components and any other affected surface.
  - Touch-up any scratches or installation damage to powder coated finish with colormatched spray paint.
  - Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.
  - Insure that protective surfacing is properly installed according to recommendations. Footings must not be exposed. Refer to the florescent orange sheet included in the front of the installation instruction booklet titled "Owners Manual".
  - Insure that hard surface warning/Playworld Systems<sup>®</sup> identification labels (shown below) are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For areas complying with ASTM F-1487 or CSA Z-614 an age appropriate label must be applied in a visible location.

• Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



Installation over a hard surface such as concrete, asphalt, or packed earth may result in serious injury or death from falls.



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#### **Swing Hangers**

- Inspect swing hangers to insure they are properly secured to the support posts.
- Use the supplied torx-style tamper-resistant bit to insure bolt connection is tight.
- Use the supplied 3/16" hex key wrench to insure the set screw connection is tight.
- · Inspect drive rivets to insure they are intact and secure.
- Visually inspect swing hangers for cracks or breakage. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

#### Fasteners

Inspect for loose fasteners.

Tightening torque specifications are:

Bolts and Nuts: Snug tighten and tighten an additional one-half turn.

<u>Set Screws:</u> Snug tighten and tighten an additional full turn.

- Inspect drive rivets to insure they are intact and secure.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

#### Welds

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

#### Finish

· Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with colormatching paint and allow to dry. Recoat area with colormatching paint if required. Drying time is approximately 8 hours between coats.

#### Footings

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

#### Surfacing

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

#### **Replacement Parts**

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

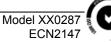
### **Equipment Maintenance**

Playworld Systems<sup>®</sup> Model XX0287 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing 8 ft. (2438 mm) Top Rail



### Warning! Exceeding 25 ft lbs (33.9 Nm) of torque on the swing hanger bolts may cause damage to the swing band.





### **Inspection Form**

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

# Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ction Date	Date Repairs Completed	
Inspect surfacing to insure proper depth and distribution.		High				Inspection Codes
Inspect swing hangers for tightness and damage.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect for loose, missing, worn, or broken fasteners.		High				
Inspect footing to insure support is secure and footing is not damaged	1.	Low				
Inspector: Name (Please Print)	Signature:				Da	te://

#### MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print)	Signature:	Date://
Page 14 of 14		Model XX0287 🛽 💟 🛛

# **GUIDELINES**

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

#### **Installation Guidelines**

• Identify all parts and thoroughly read the assembly instructions before beginning construction.

• Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and noencroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

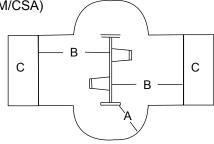
#### (ASTM / CSA)

• For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. The use zone on the sides of the swing should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

• For enclosed infant swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the measurement from the pivot point to the swing seat surface measured from a point directly beneath the pivot on the supporting structure. The use zone on the ends of the swing (support structure) should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

#### Belt/Rigid Seat Swing Zones (ASTM/CSA)

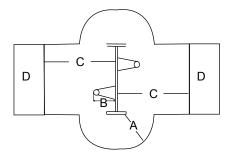
- **A** = Side Use Zone 72 in. (1829 mm)
- B = End Use Zone Height of Pivot Point from Surfacing x 2 Both Sides of Top Rail
- C = No-encroachment Zone 72 in. (1829 mm)

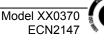


• The use zone on either end of the swing (72 inches [1829 mm]) may be overlapped by the use zone on either end of the another swing (72 inches [1829 mm]). Swing zones on either side of the top rail may **not** be overlapped by the use zones of other play equipment.

#### Infant Seat Swing Zones

- **A** = Side Use Zone 72 in. (1829 mm)
- **B** = Distance from Pivot Point to Swing Seat Surface
- C = End Use Zone: B x 2 Both Sides of Top Rail
- D = No-encroachment Zone 72 in. (1829 mm)





### (EN)

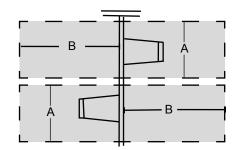
• For areas conforming to the EN-1176 Standard, the impact area shall be determined by calculating the horizontal distance where the swing seat is at an 60° arc and adding the appropriate amount of distance based upon the type of protective surfacing. This distance shall be covered by protective surfacing on both sides of the top rail. The protective surfacing shall be appropriate for the maximum fall height of the swing. There is no difference in the calculation based on the type of swing seat.

The impact area on both sides of top rail =  $(0.867 \times \text{Distance from pivot point}) + \underline{either}$  1750 mm if unitary surfacing <u>or</u> 2250 mm if loose-fill surfacing is used. There shall be a minimum corridor of 1750 mm centered on each swing seat for the length of the impact area.

#### **Use Zones - EN Compliance**

- A = Width of the corridor centered on the swing seat 1750 mm
- **B** = Length of the use zone on both sides of the top rail (8ft) Tot Seats: 3290 mm for unitary surfaced areas

or 3790 mm for areas covered with loose fill surfacing. Belt / Rigid Seats: 3510 mm for unitary surfaced areas or 4010 mm for areas covered with loose fill surfacing



• Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.

• Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.

• After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.

• Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.

• Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.

• Insure that hard surface warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.

• **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.



• The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, <u>A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment</u>. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

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

#### Maintenance

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

#### **Supervision Guidelines**

• Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.

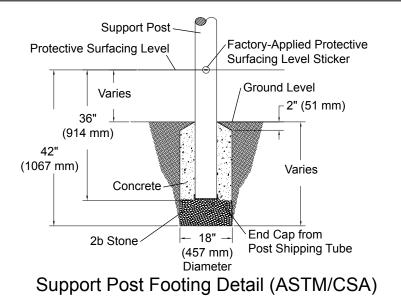
• Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.

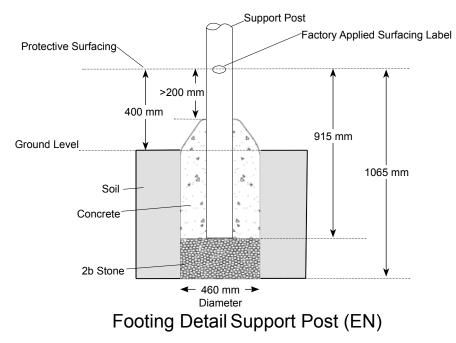
• It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.

• Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.

• Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.

• Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.





### FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete. *Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
   For example:
  - If local soil is loose or unstable, a larger footing may be required.

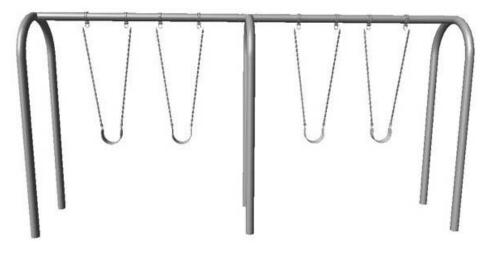
- If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.

- · Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.





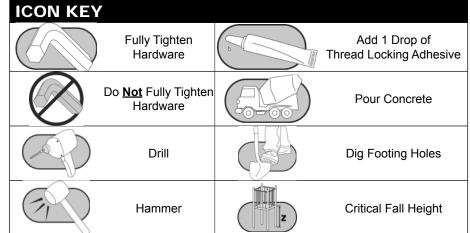
Playworld Systems<sup>®</sup> Model XX0370 5 in. (127 mm) O.D. Aluminum Arch Swing 2-Unit Add-A-Bay

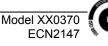


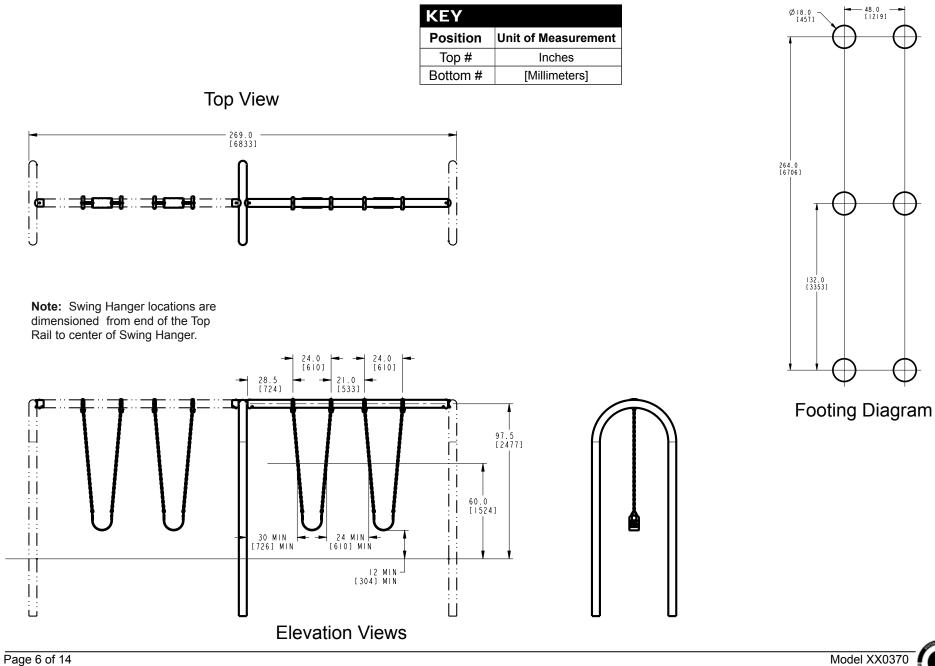
Assembly View

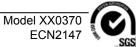
### **Installation Preparation**

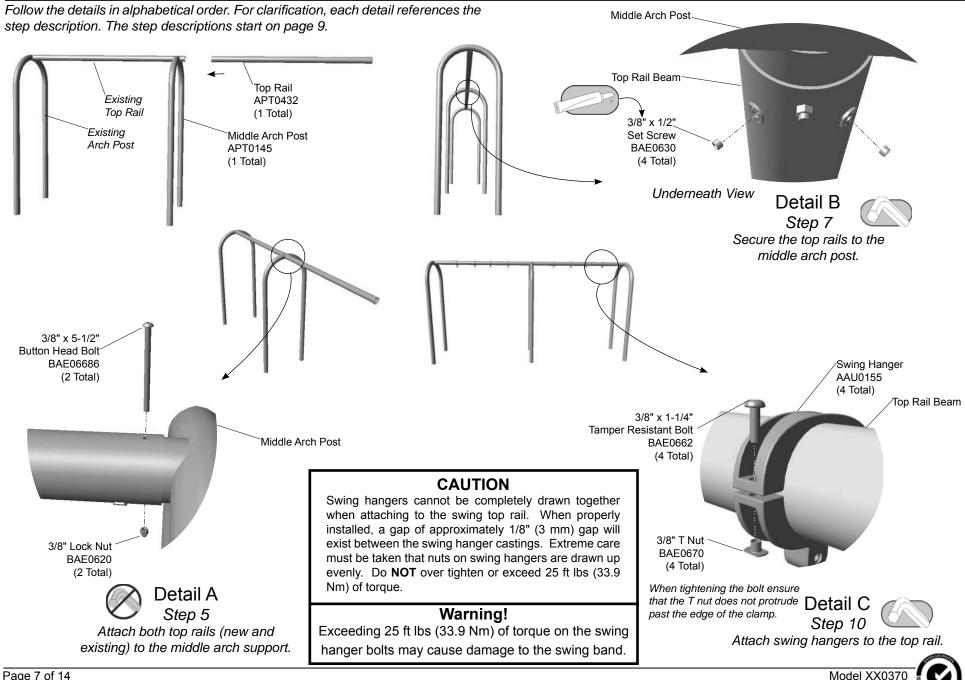
Recommended Crew:	Three (3) adults
Installation Time:	2 man-hours
Concrete Required:	0.24 cubic yard (0,18 cubic meters)
Use Zone:	Refer to Master Drawing
User Group Age (years):	ASTM/CSA: 2-12, EN: 2-14



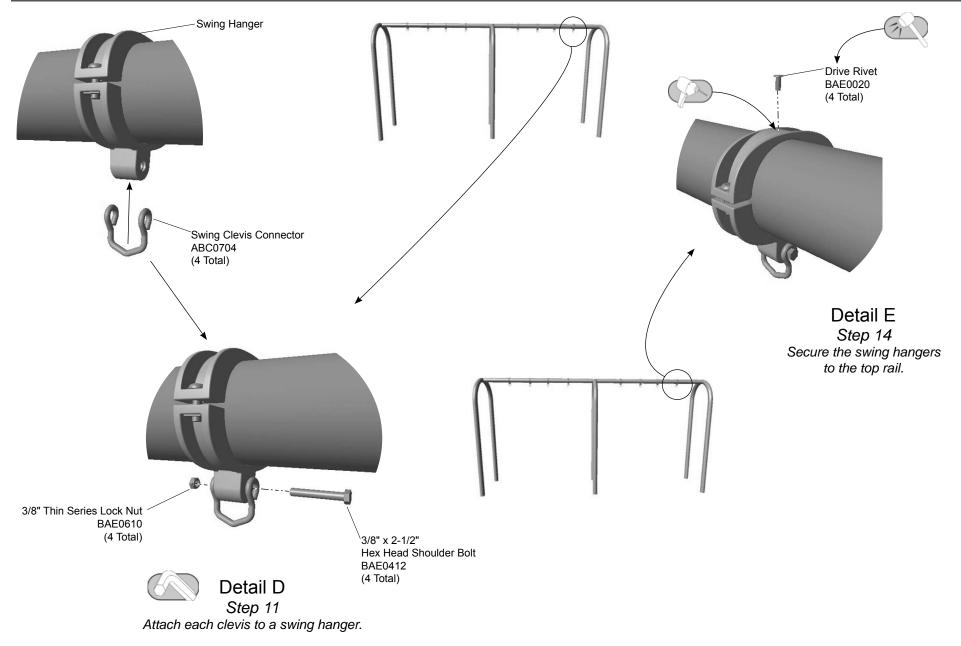








ECN2147



**Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

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

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

Step 2: Separate and identify all components and hardware.

Step 3: Prepare footings as shown in the Support Post Details on Page 4.

### **Existing Swing**

**Step 4:** Applies to adding an additional bay to a pre-existing product, remove (1) one of the existing arch supports by unscrewing and removing the connection to the top rail. Dig around the footing of the support post and transplant it to the opposing end of the bay addition as shown in the **Footing Diagram**. After completing, proceed to **Step 5**.

#### **New Installation**

#### Assemble the swing frame.

**Step 5:** Attach both top rails (new and existing) to the middle arch support. See **Detail A**. Select the top rail, the middle arch support, and the appropriate hardware. There are (2) two connections. Place the middle arch support in the excavated footings and brace. Place the top rail onto the arch stub and align holes. Attach as shown.

#### **Re-Connect opposite end of frame.**

**Step 6:** Re-attach arch support to opposite end of frame using existing hardware. Refer to the documentation that came with your original swing frame.

**Step 7:** Secure the top rails to the arch posts. See **Detail B**. Apply a drop of loctite to the set screw threads and thread each screw into a hole on the underside of the post stub. Fully tighten connections according to tightening torque specifications.

#### **Torque Specifications:**

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

#### Position the swing frame.

**Step 8:** Place the swing frame into the footings. Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) as measured from top of the protective surfacing material level to the bottom of the top rail. Fully tighten all bolts in accordance with tightening torque installation instructions. Block and brace for concrete.

**Step 9:** Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Plumb and level the component. Block and brace for concrete. Allow concrete to harden for 72 hours before proceeding with **Step 10**.

### Attach swing hangers to the top rail.

**Step 10:** Attach swing hangers to the top rail. See **Detail C**. Close the clamps around the top rail and attach as shown. Ensure hangers are properly spaced and positioned on top rail (See **Elevation View**). There is a ridge on the underside of the bottom band to keep the T nut from rotating. **When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp**. **Note:** Please read **CAUTION** before fully tightening the connections.

**Important Note:** Swing hangers should be positioned a minimum of 20" (508 mm) apart. Additionally, the horizontal distance between the vertical support and the swing shall be no less than 30 in. (760 mm) when measured at 60 in. (1524 mm) from the level of protective surfacing. Please refer to the USCPSC Handbook for Public Playground Safety for proper placement.

**Step 11:** Attach each clevis to a swing hanger. See **Detail D**. Position each clevis over the bottom hanger bushing and align holes. Insert a hex head bolt through the clevis eye, through the hanger bushing, through the other clevis eye and secure with a thin series lock nut.

**Important Note:** Tighten the thin series lock nut on shoulder bolt until the clevis binds on the swing hanger casting. Then loosen the thin series lock nut approximately 1/4 turn until the swing clevis moves freely. Insure the bolt threads are fully engaged into the nut's locking device.

**Note:** Swing clevises will need to be removed from swing hangers to install selected swing seat.



Model XX03

#### **Final Details**

**Step 12:** See Swing Seat Installation Instruction sheet for swing seat attachment. Swing seats are ordered separately.

**Step 13:** Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

#### **Torque Specifications:**

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

**Step 14:** Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

**Note:** This step should be executed after structure has been assembled and properly footed.

**Step 15:** For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the equipment at eye level.

#### XX0370 - 5 in. O.D.(127 mm) 2-UNIT ALUMINUM ARCH SWING ADD-A-BAY

PART NO.	DESCRIPTION	QTY.
AAU0155	HANGER - 5" SWING	4
ABC0704	CONNECTOR - SWING CLEVIS	4
APT0145	POST - 5" O.D. x 133-1/2" DUAL ALUM ARCH SUPPORT	1
APT0432	BEAM - 5" x 126" ARCH SWING TOP RAIL	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0412	BOLT - 3/8"-16 x 2 1/2" HEX HEAD SHOULDER	4
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	2
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE06686	BOLT - 3/8"-16 x 5.50" BUTTON HEAD - S.S.	2
BAE0670	T-NUT - 3/8"-16 x 7/16" - S.S.	4
BAE0905	WRENCH - 3/16" SHORT HEX KEY	1
BAE0915	BIT - 3/8" TAMPER RESISTANT	1
BAE0922	TOOL - TT 45 L WRENCH	1
ALB0025	LABEL - ASTM AGE APPROPRIATE	1



#### **FINAL INSPECTION**

- Playworld Systems<sup>®</sup> insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard for your area, appropriate for the fall height of each structure.
- Playworld Systems<sup>®</sup> strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently. Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
- Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
- Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
- Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
- Clean dried concrete off of components and any other affected surface.
- Touch-up any scratches or installation damage to powder coated finish with colormatched spray paint.
- Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.

• Insure that protective surfacing is properly installed according to recommendations. Footings must not be exposed. Refer to the florescent orange sheet included in the front of the installation instruction booklet titled "Owners Manual".

• Insure that hard surface warning/Playworld Systems<sup>®</sup> identification labels (shown below) are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For areas complying with ASTM F-1487 or CSA Z-614 an age appropriate label must be applied in a visible location.

• Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



Installation over a hard surface such as concrete, asphalt, or packed earth may result in serious injury or death from falls.



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Model XX03

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#### **Swing Hangers**

- Inspect swing hangers to insure they are properly secured to the support posts.
- Use the supplied torx-style tamper-resistant bit to insure bolt connection is tight.
- Use the supplied 3/16" hex key wrench to insure the set screw connection is tight.
- · Inspect drive rivets to insure they are intact and secure.
- Visually inspect swing hangers for cracks or breakage. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

#### Fasteners

Inspect for loose fasteners.

Tightening torque specifications are:

Bolts and Nuts: Snug tighten and tighten an additional one-half turn.

<u>Set Screws:</u> Snug tighten and tighten an additional full turn.

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

#### Welds

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

#### Finish

· Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with colormatching paint and allow to dry. Recoat area with colormatching paint if required. Drying time is approximately 8 hours between coats.

#### Footings

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

#### Surfacing

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

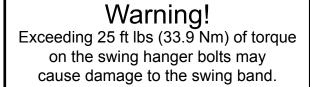
#### **Replacement Parts**

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

### **Equipment Maintenance**

Playworld Systems<sup>®</sup> Model XX0370 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing Add-A-Bay











### **Inspection Form**

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

# Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ction Date	Date Repairs Completed	
Inspect surfacing to insure proper depth and distribution.		High				Inspection Codes
Inspect swing hangers for tightness and damage.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect for loose, missing, worn, or broken fasteners.		High				
Inspect footing to insure support is secure and footing is not damaged	J.	Low				
Inspector: Name (Please Print)	Signature:				Da	ite://

#### MAINTENANCE SCHEDULE

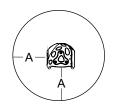
Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print)	Signature:	Date:/
Page 14 of 14		Model XX0370









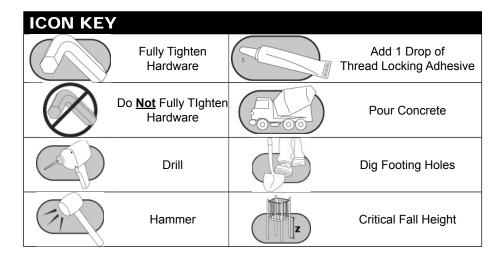
Equipment Use Zone A - (ASTM) 72 in. (1830 mm) (CSA) 1800 mm (EN) 2000 mm

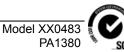
# Installation Instructions

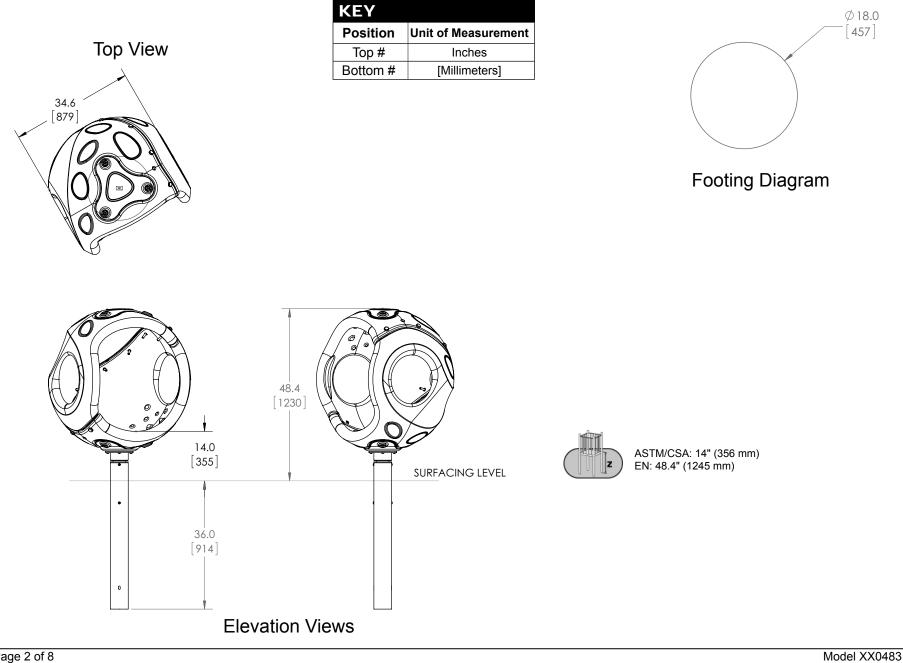
Playworld Systems<sup>®</sup> Model XX0483 Cozy Cocoon Spinning Post Mount

### **Installation Preparation**

Recommended Crew:	Two (2) adults
Installation Time:	1.5 man-hours
Concrete Required:	0.13 cubic yard (0,10 cubic meters)
Use Zone:	Refer to information below
User Group Age (years):	ASTM/CSA: 2-12, EN: 2-14





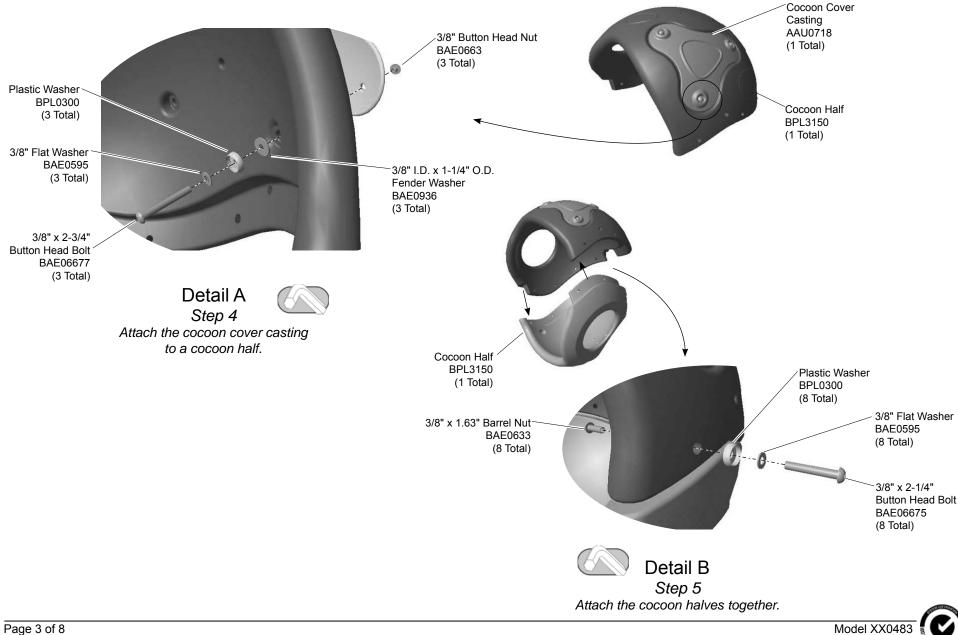


PA1380

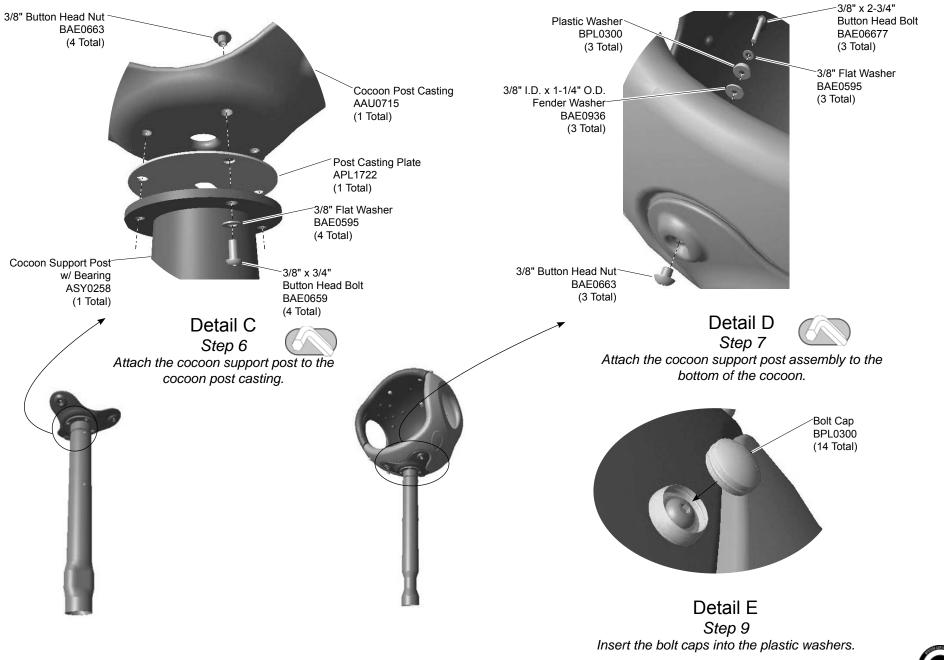
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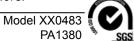
Page 2 of 8

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



PA1380





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

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

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

Step 2: Separate and identify all components and hardware.

**Step 3:** Excavate the footing as shown in the **Footing Details** in the *Annex* at the end of this document. Use the **Support Post** footing detail for the cocoon support post.

**Step 4:** Attach the cocoon cover casting to a cocoon half. See **Detail A**. Insert the casting onto a cocoon half and attach as shown. Fully tighten the connections according to tightening torque specifications.

#### **Torque Specifications:**

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

**Step 5:** Attach the cocoon halves together. See **Detail B**. Place the two cocoon halves together and attach as shown. Fully tighten the connections according to tightening torque specifications.

**Step 6:** Attach the cocoon support post w/ bearing to the cocoon post casting. See **Detail C**. Position the support post and casting plate against the bottom of the cocoon post casting and attach as shown. Fully tighten the connections according to tightening torque specifications.

**Step 7:** Attach the cocoon support post assembly to the bottom of the cocoon. See **Detail D**. Place support post assembly against the bottom of the cocoon and attach as shown. Fully tighten the connections according to tightening torque specifications.

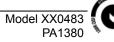
#### Final Details.

**Step 8:** Plumb and level the component in it's footing. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

**Step 9:** Select plastic bolt caps and press into the plastic washers. See **Detail E**.

Hint: The bolt caps install more easily when they are warm.

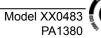
**Step 10:** For areas complying with ASTM standard F1487 or the CSAZ-614, apply the age appropriate label to the component at eye level or at a visible location.



#### XX0483 - COZY COCOON SPINNING POST MOUNT

PART NO.	DESCRIPTION	QTY.
AAU0715	COCOON MOUNT (POST/BEARING)	1
AAU0718	COCOON COVER	1
APL1722	PLATE - 7.75" O.D. x 12 GA	1
ASY0258	ASSEMBLY - COCOON BEARING	1
BAE0595	WASHER - 3/8" SAE FLAT	18
BAE0633	NUT - 3/8"-16 x 1.63 BARREL	8
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - S.S.	4
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	10
BAE06675	BOLT - 3/8"-16 x 2-1/4" BUTTON HEAD - S.S.	8
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - S.S.	6
BAE0922	TOOL - TT 45 L WRENCH	2
BAE0936	WASHER - 3/8" I.D. x 1-1/4" O.D. FENDER	6
BPL0300	CAP - 3/8" BOLT	14
BPL3150	COCOON	2
ALB0025	LABEL - AGE APPROPRIATE SHEET	1
BAD0085	THREAD LOCKING ADHESIVE	1





SGS



#### Fasteners

Inspect for loose fasteners.

Tightening torque specifications are:

Bolts and Nuts: Snug tighten and tighten an additional one-half turn.

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

#### **Plastic Parts**

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

#### Castings

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

#### Welds

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

#### Finish

· Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with colormatching paint and allow to dry. Recoat area with colormatching paint if required. Drying time is approximately 8 hours between coats.

#### Footings

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

#### Surfacing

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

#### **Replacement Parts**

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

### **Equipment Maintenance**

Playworld Systems<sup>®</sup> Model XX0483 Cozy Cocoon Spinning Post Mount







## **Inspection Form**

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

## Preventive Maintenance

... for Safety's Sake!

INSPECTION CHECKLIST		Frequency	Inspe Code	ection Date	Date Repairs Completed	
Inspect plastic parts for damage.		Medium				Inspection Codes
Inspect for loose, missing, worn, or broken fasteners.		High				<b>P</b> = Pass <b>F</b> = Fail
Inspect metal parts for structural and finish damage.		Medium				<b>NA</b> = Not Applicable
Inspect surfacing to insure proper depth and distribution.		High				
Inspect footing to insure support is secure and footing is not damage	ed.	Low				
						]
Inspector: Name (Please Print)	Signature:				Da	

#### MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date
Repairer: Name (Please Print)	Signature:	Date:/	_/

### Guidelines



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

#### **Installation Guidelines**

• Identify all parts and thoroughly read the assembly instructions before beginning construction.

• Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and noencroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

• **ASTM compliance:** For rotating play equipment that rotates around a vertical axis, the use zone should extend on all sides a minimum distance of 72 inches (1829 mm). This use zone may **not** be overlapped by the use zones of adjacent play equipment. The exemption is equipment where the diameter of the platform is less than 20 in. (510 mm) may overlap if the adjacent designated play surfaces of each structure are less than 30 in. (760 mm) above the protective surface. If adjacent designated play surfaces on either structure exceed a height of 30 in. (760 mm), the minimum distance between structures shall be 108 in. (2740 mm).

• **CSA compliance:** For rotating play equipment, the use zone should extend on all sides a minimum distance of 1800 mm. This use zone may **not** be overlapped by the use zones of adjacent play equipment. A no-encroachment zone is also required for play equipment over 500 mm in diameter that rotates around a vertical axis. In addition to the use zone measurement, this zone will extend an additional 1800 mm and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment.

• **EN compliance:** For rotating play equipment, the use zone should extend on all sides a minimum distance of 2000 mm. This use zone may **not** be overlapped by the use zones of adjacent play equipment. There must also be a head clearance of 2000 mm above the maximum height of the rotating play equipment. Refer to the Use Zone diagram or master structure drawing.

• Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.

• Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.

• After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.

• Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.

• Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.

• Insure that Age Appropriate and Hard Surface Warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.



### **Guidelines**

• **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. **Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.** 

• The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, <u>A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment</u>. Critical fall heights for Europe and Canadian compliance shall be listed on the elevation page or master structure drawing if they differ from the ASTM standard. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

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

#### Maintenance

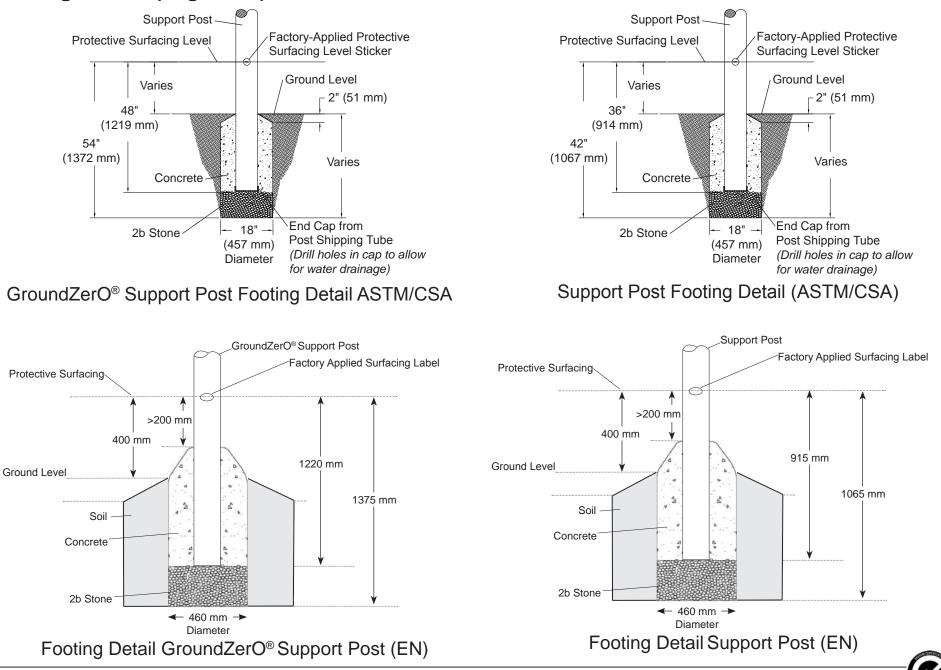
• Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, **a comprehensive maintenance program must be developed for each playground and strictly followed**. All equipment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

#### **Supervision Guidelines**

• Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.

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

# Footing Details (in ground)



**Guidelines & Information (fs RPE)** 

Annex Page 3 of 6



# Footing Details (in ground)

#### Support Post Factory-Applied Protective Surfacing Level Sticker Protective Surfacing Level-Ground Level Varies -2" (51 mm) (1219 mm) 54' Varies (1372 mm) Concrete -18"-Block (457 mm) **Porous Material** Diameter GroundZerO® Support Post Footing Detail ASTM/CSA

**Block Option** 

Support Post Factory-Applied Protective Surfacing Level Sticker Protective Surfacing Level Ground Level Varies -2" (51 mm) 36 (914 mm) 42' (1067 mm) Varies Concrete<sup>4</sup> \_18"\_\_\_ Block (457 mm) Porous Material Diameter Support Post Footing Detail (ASTM/CSA) **Block Option** 

### FOOTING NOTES (IN GROUND)

• Support post footing depth equals 42 in. (1067 mm) minus the depth of the protective surfacing material. The posts are designed to have 24" (610 mm) in concrete.

*Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).

 GroundZerO<sup>®</sup> support post footing depth equals 54 in. (1372 mm) minus the depth of the protective surfacing material. The posts are designed to have 36" (914 mm) in concrete.

*Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 42 in. (1067 mm).

- Most support posts and component support legs will have either a factory-applied sticker with a line, or factory-applied mark designating the level of protective surfacing on a clear and level installation site. The footing depth measurements are based on this line/mark.
- If the play equipment is installed on uneven terrain, maintain support post mark for the protective surfacing level at the lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase the bottom of the support post in concrete. Place the post directly on packed stone or other porous material.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.

For example:

- If local soil is loose or unstable, a larger footing may be required.

- If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.

- The base of the footing must be below the frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.

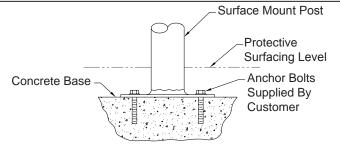
**Guidelines & Information (fs RPE)** 



**Footing Notes** 

## Footing Detail (surface mount)

### **Footing Notes**



Surface Mount Footing Detail

### FOOTING NOTES (SURFACE MOUNT)

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

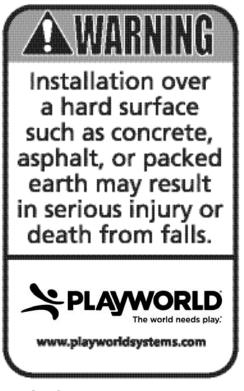
Surface mount hardware is not supplied. Customer is responsible for concrete base and providing surface mount hardware as specified by a registered structural engineer for each specific project application.

#### FINAL INSPECTION

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

• Insure that hard surface warning/Playworld Systems<sup>®</sup> identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For locations complying with ASTM F1487 or CSA Z-614, Age Appropriate labels must also be applied in a visible location.

• Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



Surfacing Warning Label



