#### 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.
- 7. 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> Safety (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
   -Children's Playspaces and Equipment 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 <a href="http://www.csa.ca">http://www.csa.ca</a> (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.

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# 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).
- 14. Attach swings, rings, and tire swings after resilient surfacing material is in place. Completely close all "S" hooks. See ASTM Requirements for Fastening Devices in Figures 9 12 (located on page 13).
- 15. Attach Warning and Manufacturer labels. See Warning and Manufacturer Labels for instructions and Figures 13 14 (located on pages 14 15).
- 16. After installation is complete, inspect the entire unit. Make sure all fastening hardware and setscrews are tight, and all drive pins and rivets have been installed. Make sure all "S" hooks are completely closed. Check all coated parts to ensure coating is covering all metal; if not, follow repair instructions listed in the Maintenance section.

#### GENERAL INSTALLATION GUIDELINES

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 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).

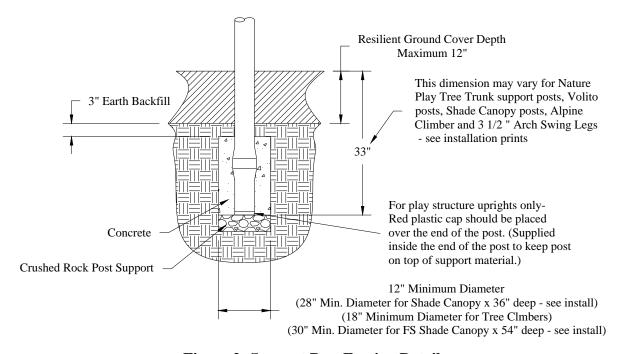


# **NO IMPACT WRENCHES**

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

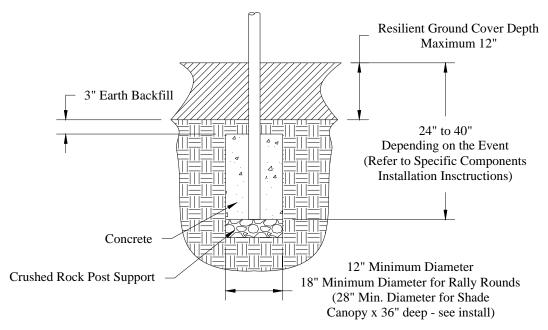


Figure 3: Play Event Footing Detail

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)

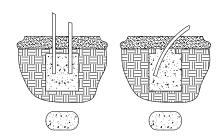


Figure 4: Optional Play Event Footing

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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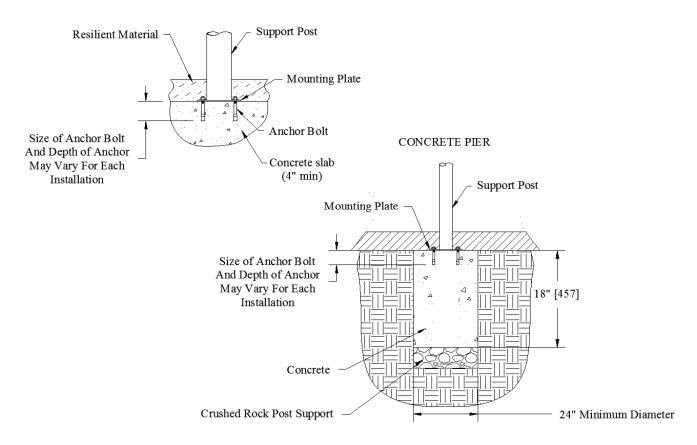
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# TYPICAL CONCRETE FOOTINGS

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.)

9 OVERHEAD SNAKE RIGHT 90° **SLIDING** TRIPLE RAIL SLIDE POLE 6' <u>ASTM\_</u>F1487 48" ROCK 48 ASTM F1487-98 CLIMBER PIPE WALL TRANSFER PIPE WALL STEERING WHEEL POINT 60" DIA SKY PODS TRANSFER STAIR ARCHED LADDER 8" TRANSFER STEP CENTIPEDE CLIMBER ŵ USE ZONE USE ZONE

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# Figure 6: Sample Site Plan Drawing RESILIENT SURFACING MATERIAL

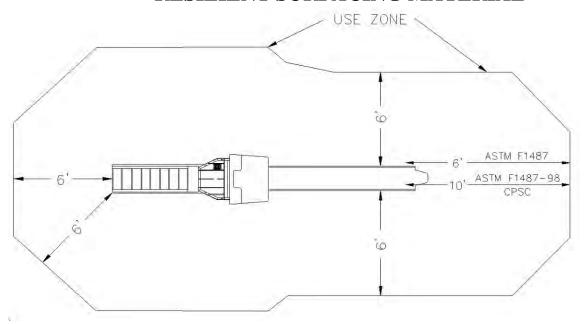


Figure 7: Use Zone for Slides

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

To the front and to the rear of to-fro swings, the use zone should extend a "minimum distance of 2X on a line extending  $90^{\circ}$ 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

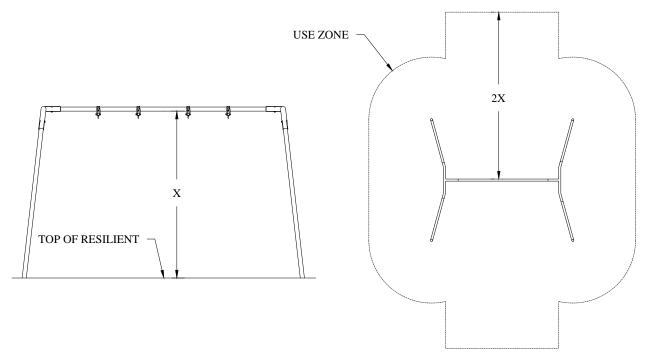


Figure 8: Use Zones for To-Fro Swings

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.

Table 1: CPSC Critical Fall Heights (taken from pub. 325, page 10)

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

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

# ASTM REQUIREMENTS FOR FASTENING DEVICES

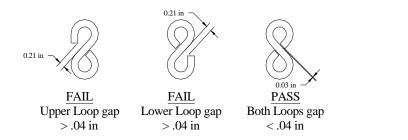


Figure 9: Check loops for .04" gap

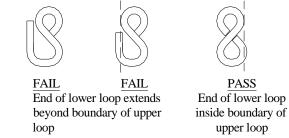


Figure 10: Check lower loop projection



Figure 11: Check upper loop projection

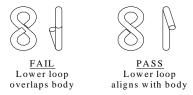


Figure 12: Check lower loop alignment

#### 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**

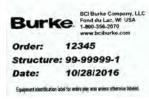
- Choose highly visible label locations at a height of 4' to 5' above the resilient surfacing material. See Figure 13.
- The preferable location would be out of direct sunlight.
- Posts are the best location for labels. Do not place on PVC coated items or areas of high wear.
- Surface must be clean and 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.







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.



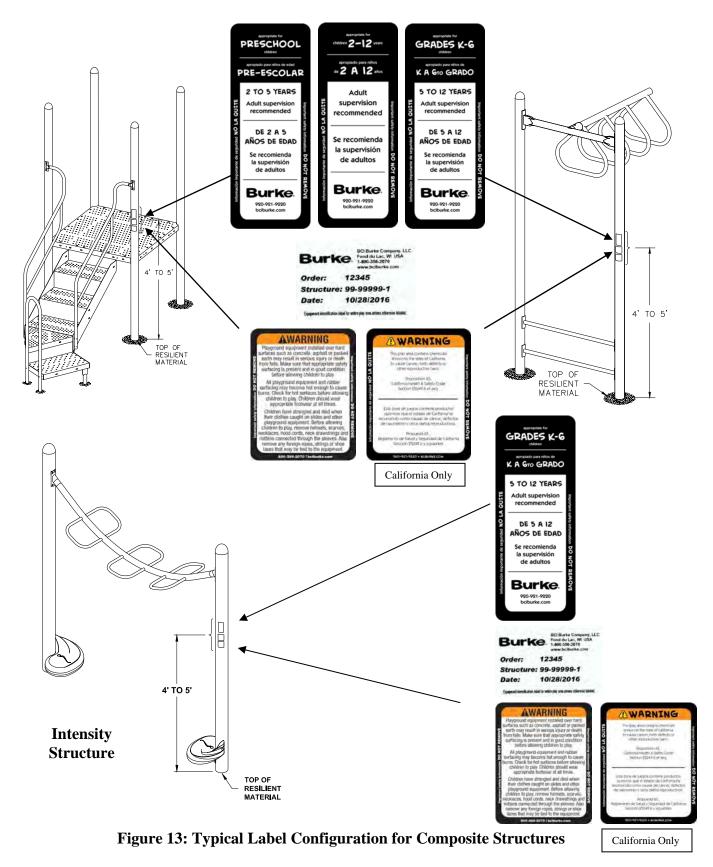


Warning Labels - Place one directly underneath each of the Age-appropriate Safety Labels and/or Manufacturer's Identification Label. If you have additional labels they should be placed near other entrances on opposite sides of the structure. Warning Labels are a Requirement in the ASTM F1487 Standard 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



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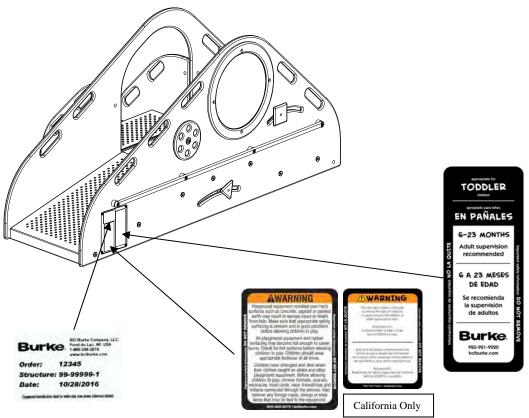


Figure 14: Typical Label Configuration for Composite Structures

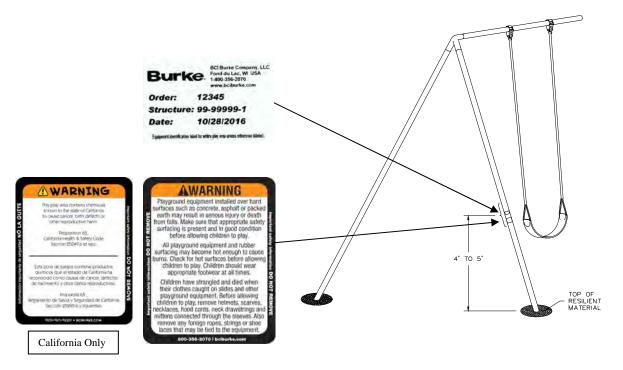


Figure 15: Typical Label Configuration for Non-Age Specific Equipment

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# 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

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>

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.
- 6. Continue to tighten canopy by carefully pulling tensioning arms down into 'Closed Position'. If canopy is too tight to pull arm down, loosen turnbuckle tension a small amount. See Figure 18.

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

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

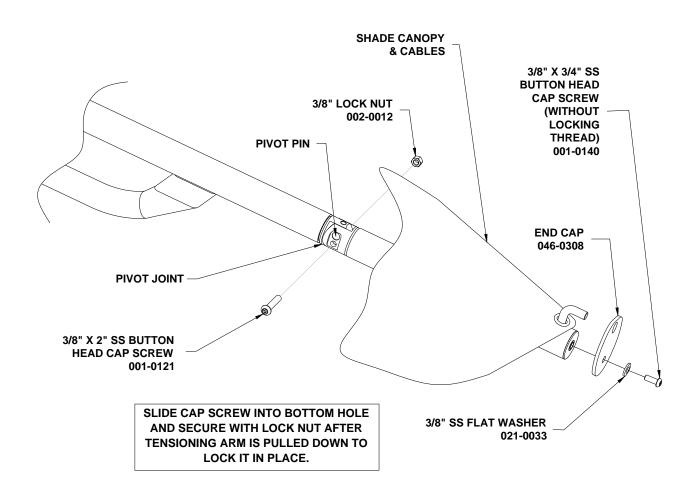


Figure 16: Tensioning Arm in 'Closed Position'

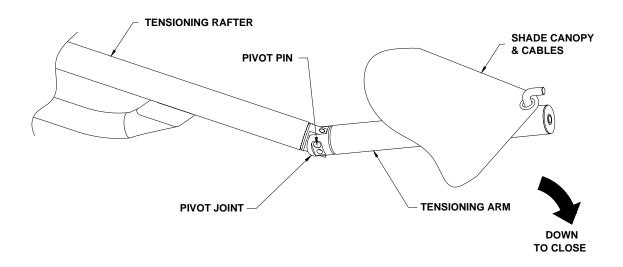


Figure 17: Tensioning Arm in 'Open Position'

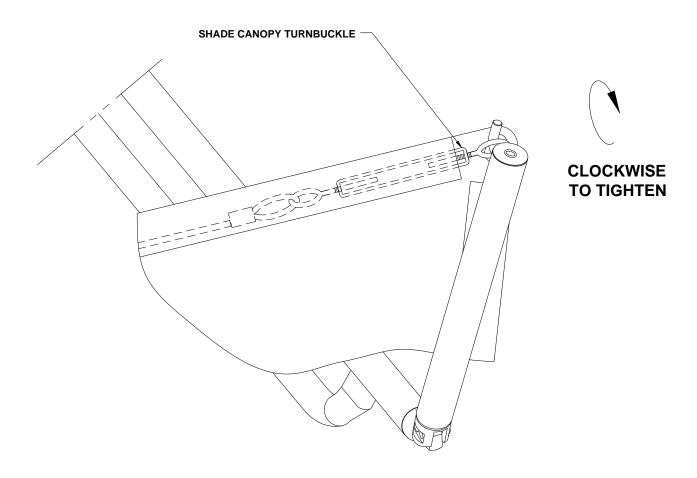


Figure 18: Tightening/Loosening Shade Canopy Turnbuckle

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# **Sensory Panel Maintenance and Troubleshooting**

#### **Care and Maintenance**

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

#### Cleaning

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

#### **Speaker Grill**

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

#### **Troubleshooting Guide**

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.

Fault	Solution
No sound or intermittent sound with older batteries	<ul> <li>Check that batteries are firmly seated between the terminals in the battery holder and are in the correct orientation. Check that the speaker and sensor connectors are securely seated.</li> <li>Make certain that the sound chip on the printed circuit board has not been dislodged. If you suspect that it is dislodged, see the instructions below.</li> <li>Replace the batteries with high-quality alkaline batteries (i.e. Duracell Ultra or better).</li> </ul>
	ŕ
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	X		X	X		
Daily	Broken Anchor Bolts	X	X	X	X	X	X
Daily	Worn Chains	X		X	X		
Daily	Broken Guardrails/Handrails	X	X	X	X	X	X
Daily	Sharp Edges	X	X	X	X	X	X
Daily	Loose or Missing Nuts/Bolts	X	X	X	X	X	X
Daily	Sharp Points/Protrusions	X	X	X	X	X	X
Daily	Unplugged Holes in Pipe	X	X	X	X	X	X
Daily/Weekly	Broken Welds	X	X	X	X	X	X
Daily/Weekly	Inadequate Surfacing	X	X	X	X	X	X
Daily/Weekly	Ropes for cuts or fraying with exposed steel reinforcement strands			X	X		
Daily/Weekly	Vandalized or Cracked PVC Coating	X		X	X		
Weekly	Worn Pinions/Clevises	X		X	X		
Weekly	Exposed Footings	X	X	X	X	X	X
Weekly	Worn Bearings	X			X		X
Weekly	Rust of Metal	X	X	X	X	X	X
Weekly	Corrosion of Aluminum	X	X	X	X	X	X
Monthly	Add grease lubrication to wheel bearings	X			X		X
Monthly	Play Mat (integrity and adhesion to surface if applicable)	X	X	X	X	X	X
Spring/Fall	Pinch Points	X	X	X	X	X	X
Inclement Weather (High winds, Snow)	Remove Shade Canopy				X		

# **General Maintenance Checklist**

Date	1								1	1		
_ ****												
Visible cracks, bending, warping												
Accessible sharp edges or points												
Rusted metal surfaces												
Rusting of metal and corrosion on												
aluminum												<b></b>
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												
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#### **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®

# 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® 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

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.

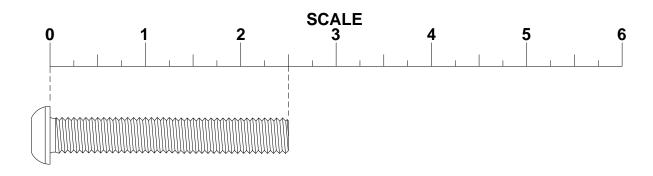
**Installation:** All equipment is shipped unassembled. For a list of factory-certified installers in your area, please contact your Burke representative.

**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.

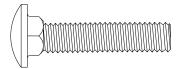
**Loss or Damage in Transit:** A signed bill of lading is our receipt from a carrier that our shipment to you was complete and in good condition upon arrival. Before you sign, please check the Bill of Lading carefully when the shipment arrives to make sure nothing is missing and there are no damages.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

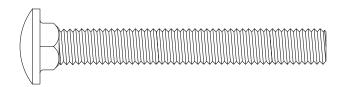


001-0116 - 3/8" X 3/4" SS BUTTON HEAD CAP SCREW
001-0117 - 3/8" X 1" SS BUTTON HEAD CAP SCREW
001-0118 - 3/8" X 1 1/4" SS BUTTON HEAD CAP SCREW
001-0119 - 3/8" X 1 1/2" SS BUTTON HEAD CAP SCREW
001-0120 - 3/8" X 1 3/4" SS BUTTON HEAD CAP SCREW
001-0121 - 3/8" X 2" SS BUTTON HEAD CAP SCREW
001-0122 - 3/8" X 2 1/4" SS BUTTON HEAD CAP SCREW
001-0123 - 3/8" X 2 1/2" SS BUTTON HEAD CAP SCREW
001-0140 - 3/8" X 3/4" SS BUTTON HEAD CAP SCREW
001-0140 - 3/8" X 3/4" SS BUTTON HEAD CAP SCREW W/OUT LOCKING THREAD
001-0143 - 3/8" X 1/2" SS BUTTON HEAD CAP SCREW
001-0152 - 3/8" X 1 1/4" SS BUTTON HEAD CAP SCREW W/OUT LOCKING THREAD
001-0153 - 3/8" X 1 1/2" SS BUTTON HEAD CAP SCREW W/OUT LOCKING THREAD
001-0155 - 3/8" X 1" SS BHCS W/O LOCKING THREAD
001-0165 - 3/8" X 3/8" SS BUTTON HEAD CAP SCREW



001-0083 - 1/4" X 1 1/4" CARRIAGE BOLT

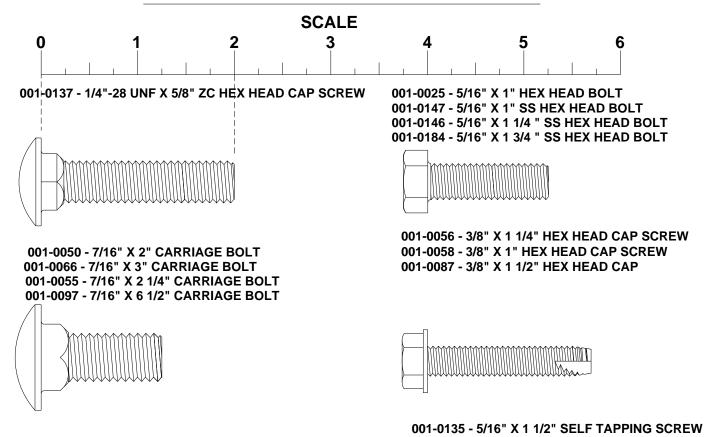
001-0010 - 5/16" X 3/4" CARRIAGE BOLT 001-0163 - 5/16" X 1 1/2" CARRIAGE BOLT 001-0074 - 5/16" X 4 1/4" CARRIAGE BOLT 001-0082 - 5/16" X 2 3/4" CARRIAGE BOLT 001-0080 - 5/16" X 2" CARRIAGE BOLT 001-0077 - 5/16" X 1 1/4" CARRIAGE BOLT 001-0081 - 5/16" X 2 1/4" CARRIAGE BOLT



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" 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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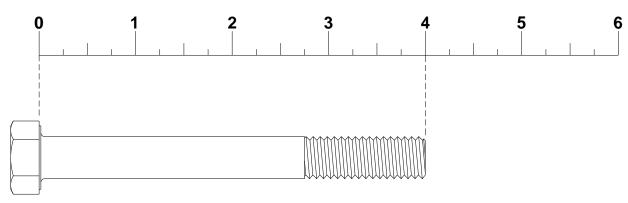


001-0141 - 1/2" X 1 1/4" CARRIAGE BOLT



001-0023 - 3/8" X 2 3/4" HEX HEAD CAP SCREW 001-0046 - 3/8" X 4 1/2" HEX HEAD CAP SCREW 001-0072 - 3/8" X 2" HEX HEAD CAP SCREW 001-0073 - 3/8" X 3 3/4" HEX HEAD CAP SCREW 001-0134 - 3/8" X 3 1/2" HEX HEAD CAP SCREW 001-0076 - 3/8" X 3 1/4" HEX HEAD CAP SCREW 001-0084 - 3/8" X 2 1/4" HEX HEAD CAP SCREW 001-0089 - 3/8" X 3" HEX HEAD CAP SCREW 001-0090 - 3/8" X 5" HEX HEAD CAP SCREW 001-0101 - 3/8" X 4" HEX HEAD CAP SCREW





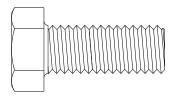
001-0096 - 7/16" X 3 1/2" HEX HEAD CAP SCREW 001-0132 - 7/16" X 4" HEX HEAD CAP SCREW

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

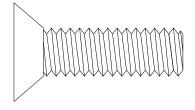


001-0037 - 7/16" X 3" HEX HEAD CAP SCREW - SLOTTED 001-0047 - 7/16" X 4 1/2" HEX HEAD CAP SCREW - SLOTTED

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



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



001-0139 - 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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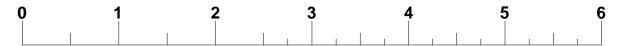
SCALE 0 2 3 019-0002 - 3/16" X 7/8" DRIVE RIVET 019-0004 - 3/16" X 1 5/32" RIVET 002-0053 - 3/8" X 1/2" SS SOCKET HEAD BARREL NUT 002-0063 - 3/8" X 3/8" SS SOCKET HEAD BARREL NUT 019-0010 - 5/32" X 3/8" DRIVE RIVET 002-0062 - 3/8" X 3/4" SS SOCKET HEAD BARREL NUT 019-0016 - 1/8" X 15/32" DRIVE RIVET 019-0020 - 1/4" X 1/2" DRIVE RIVET 019-0009 - 1/4" X 3/4" DRIVE RIVET 002-0040 - 3/8" SS T-NUT FORMED 002-0028 - 1/4" T-NUT 002-0061 - 3/8" NUT INSERT (7 GA GRIP) 002-0042 - 3/8" NUT INSERT

021-0022 - 3/8" LOCK WASHER

BCI Burke Company, LLC 021-0027 - 7/16" LOCK WASHER

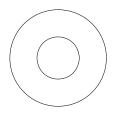
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### **SCALE**

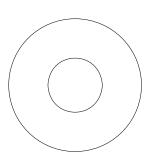




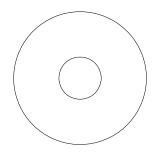
021-0032 - 5/16" SS FLAT WASHER 021-0028 - 5/16" FLAT WASHER



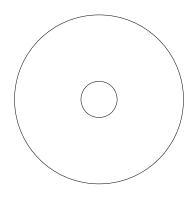
021-0033 - 3/8" SS FLAT WASHER 021-0029 - 3/8" FLAT WASHER



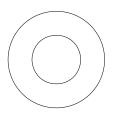
021-0025 - 1/2" FLAT WASHER 021-0034 - 1/2" SS FLAT WASHER



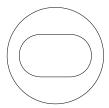
021-0008 - 1 3/8" OD WASHER



021-0012 - 3/8" X 1 3/4" WASHER 021-0001- 1 3/4" OD X 13/16" ID X 3/32" WASHER



021-0042 - WASHER, NYLON, 1/2" ID X 1" OD X .125 THK



021-0019 - 3/8" X 1" OD SLOTTED WASHER

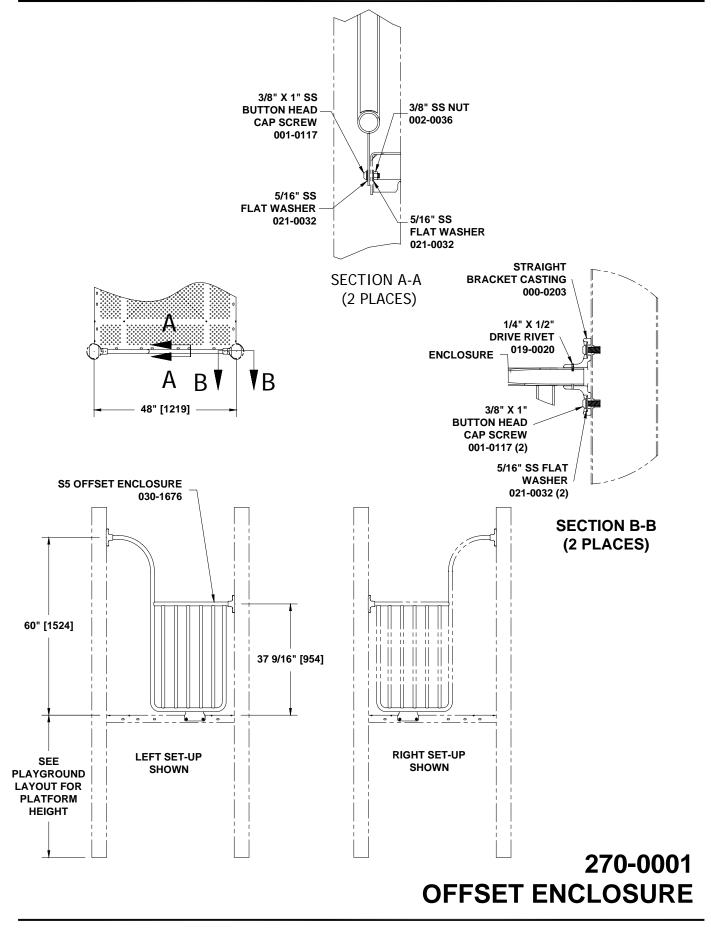
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**Installation Instructions** 





PARTS LIST			
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>	
000-0203	CASTING, STRAIGHT BRACKET	2	
030-1676	S5 OFFSET ENCLOSURE	1	
036-1284	HARDWARE PACKAGE	1	

<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.

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

SHIPPING WEIGHT: 30 LBS.

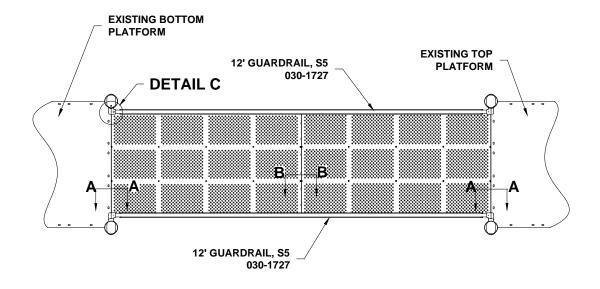
### **INSTALLATION INSTRUCTIONS**

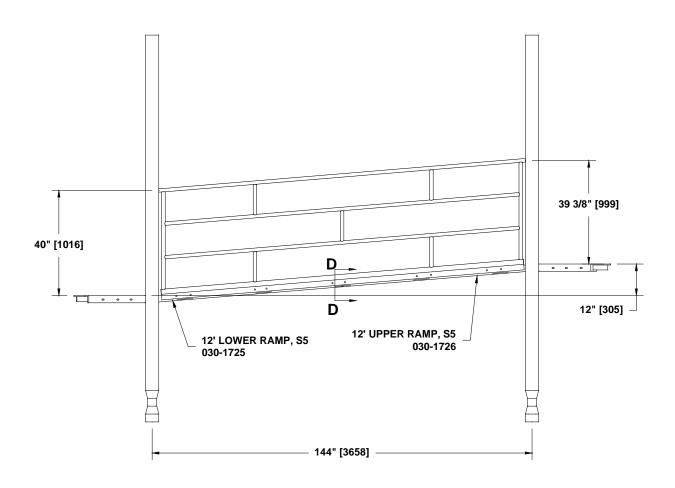
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

- 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.

270-0001.doc Description: OFFSET ENCLOSURE REV: 01 PCN: 14-0254 10/20/2014

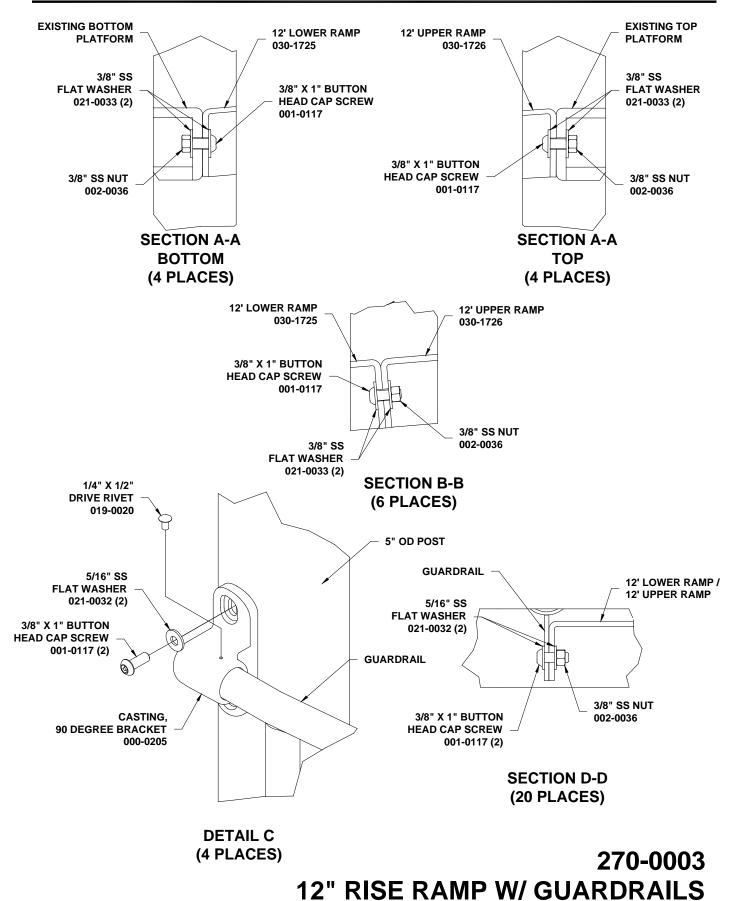






## 270-0003 12" RISE RAMP W/ GUARDRAILS





PART NO.	PARTS LIST	QTY
000-0205	CASTING, 90 DEGREE BRACKET	4
030-1725	12' LOWER RAMP, S5	1
030-1726	12' UPPER RAMP, S5	1
030-1727	12' GUARDRAIL, S5	2
036-1114	HARDWARE PACKAGE	1

<u>CASTING, 90 DEGREE BRACKET</u>: 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.

<u>HARDWARE PACKAGE</u>: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.

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

SHIPPING WEIGHT: 509 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.

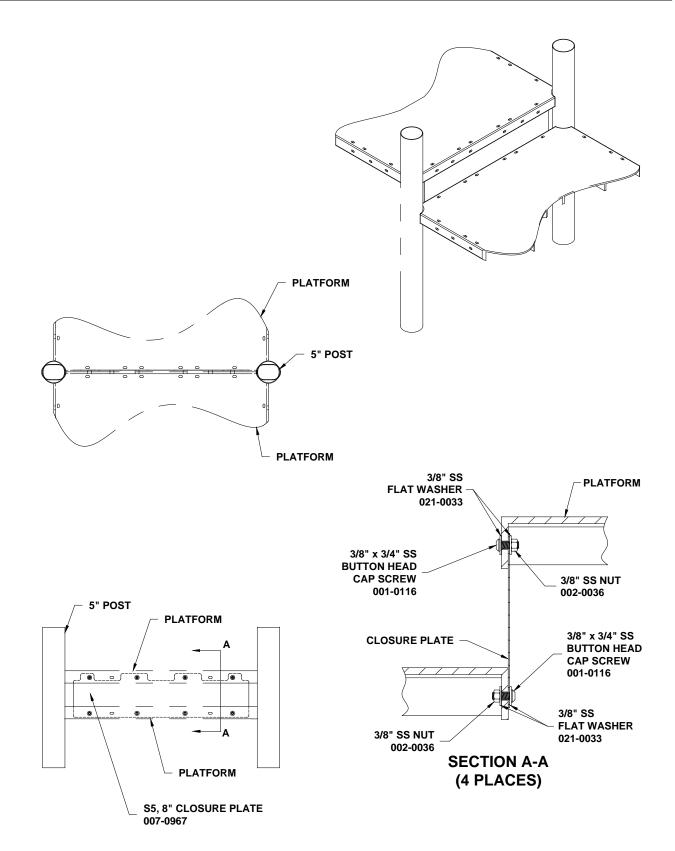
- 1. Determine location of 12" rise ramp.
- 2. Support upper of 12' lower ramp.
- 3. Attach 12' LOWER RAMP to existing lower platform using 3/8" X 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION A-A BOTTOM.
- 4. Attach 12' UPPER RAMP to existing upper platform and 12' lower 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.	PARTS LIST <u>DESCRIPTION</u>	<u>QTY</u>
007-0967 036-1102	S5 8" CLOSURE PLATE HARDWARE PACKAGE	1 1
Note: Hardw that is not no	vare package(s) may include extra har ecessary for this installation.	rdware

<u>S5 8" CLOSURE PLATE</u>: 14 GA galvanized steel plate finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steeel

SHIPPING WEIGHT: 10 LBS.

### **INSTALLATION INSTRUCTIONS**

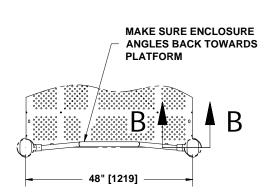
NOTE: PVC coating may need to be removed from mounting holes of platforms before installation.

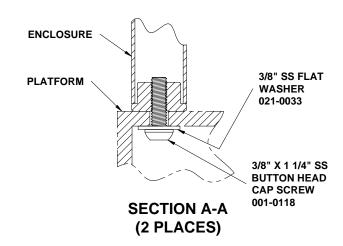
- 1. Attach CLOSURE PLATE to upper and lower platform using 3/8" x 3/4"SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. See SECTION A-A.
- 2. Tighten hardware.

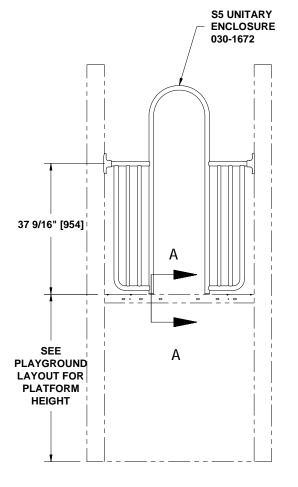
270-0050.doc Description: 8" CLOSURE PLATE

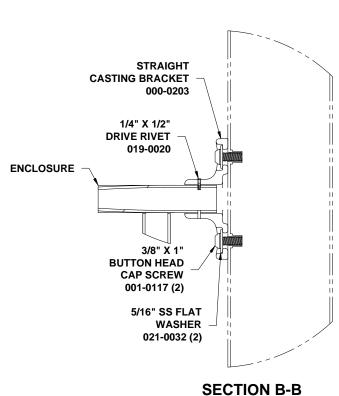
REV: 02 PCN: 13-0089 5/10/2013











## 270-0112 UNITARY ENCLOSURE

(2 PLACES)

I AKTO LIST				
PART NO.	<b>DESCRIPTION</b>	QTY		
000-0203	CASTING, STRAIGHT BRACKET	2		
030-1672	S5 UNITARY ENCLOSURE	1		
036-0197	HARDWARE PACKAGE	1		
036-0819	HARDWARE PACKAGE	1		

DADTELIET

### **SPECIFICATIONS**

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

<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.

HARDWARE PACKAGE: Stainless steel.

HARDWARE PACKAGE: Aluminum Rivets

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

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.

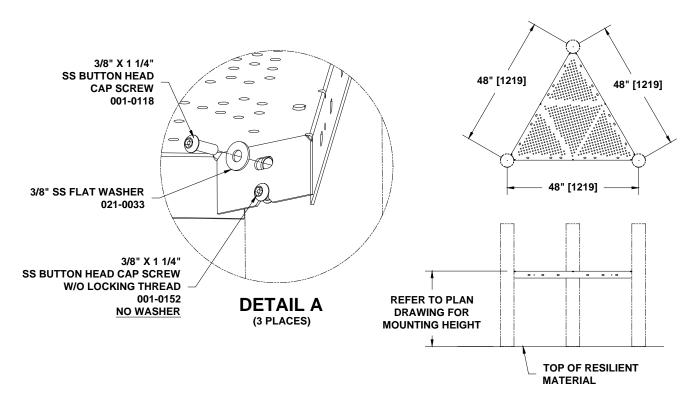
NOTE: Make sure enclosure angles back towards platform. (See Top View)

- 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.

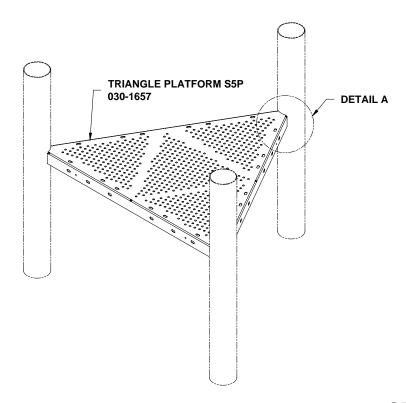
270-0112.doc Description: UNITARY ENCLOSURE

REV: 01 PCN: 10-0270 11/5/2010





### **ELEVATION VIEW**



## 270-0129 TRIANGLE PLATFORM S5P

# PARTS LIST PART NO. DESCRIPTION QTY 030-1657 TRIANGLE PLATFORM S5P 1 036-1100 HARDWARE PACKAGE 1

TRIANGLE PLATFORM S5P: 12 GA HRPO sheet, finished with a PVC Coating
HARDWARE PACKAGE: Stainless steel

**SPECIFICATIONS** 

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

SHIPPING WEIGHT: 48 LBS.

### **INSTALLATION INSTRUCTIONS**

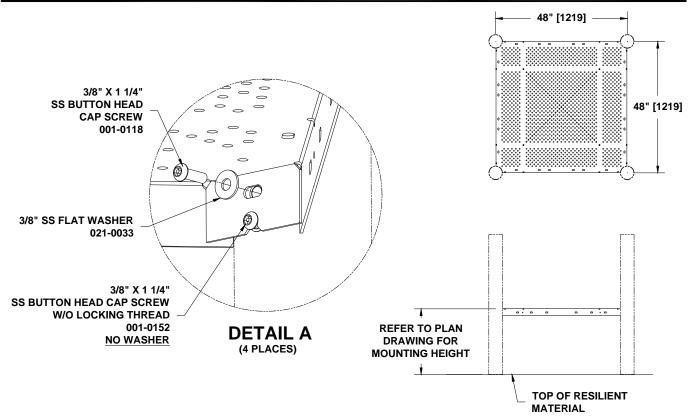
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Locate the double sets of platform mounting holes in each post.
- 2. Partially thread a 3/8" x 1 1/4" SS button head cap screw W/O LOCKING THREAD into the lower hole of the double set of mounting holes WITHOUT a washer. **DO NOT TIGHTEN**. See DETAIL A.
- 3. Slide the three corners of the TRIANGLE PLATFORM S5P 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.

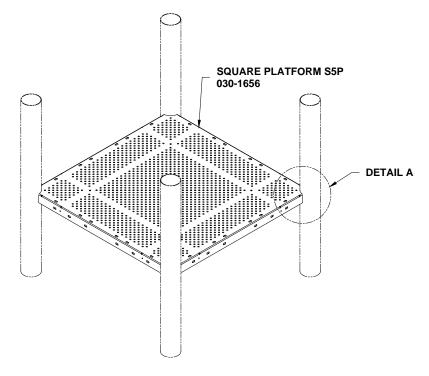
270-0129.doc Description: TRIANGLE PLATFORM

REV: 01 PCN: 13-0089 5/10/2013





### **ELEVATION VIEW**



## 270-0130 SQUARE PLATFORM S5P

# PARTS LIST PART NO. DESCRIPTION QTY 030-1656 SQUARE PLATFORM S5P 1 036-1101 HARDWARE PACKAGE 1

SQUARE PLATFORM S5P: 12 GA HRPO sheet, finished with a PVC Coating

HARDWARE PACKAGE: Stainless steel

**SPECIFICATIONS** 

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

SHIPPING WEIGHT: 106 LBS.

### **INSTALLATION INSTRUCTIONS**

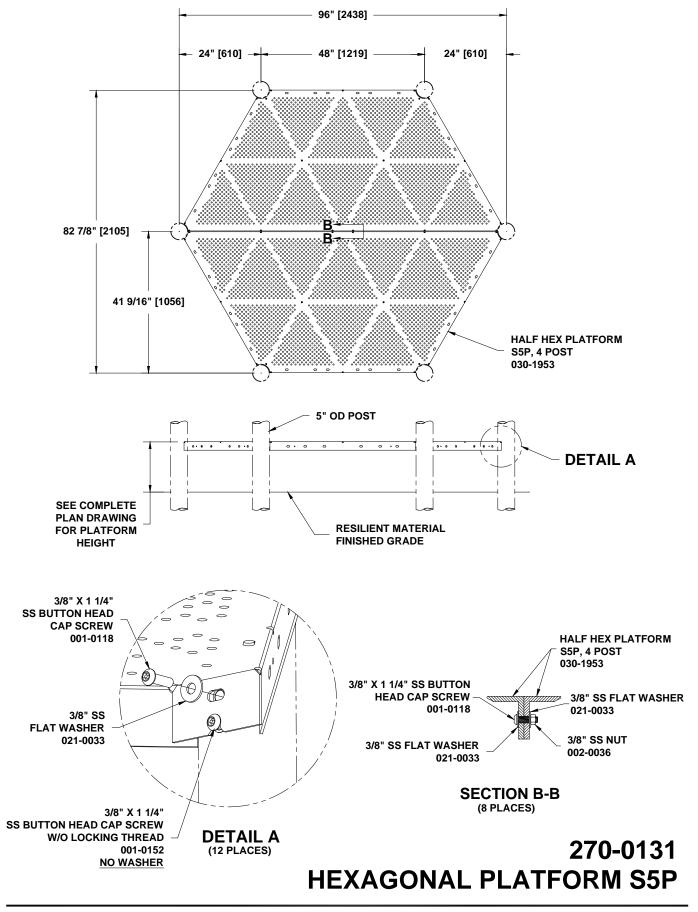
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 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.

270-0130.doc Description: SQUARE PLATFORM

REV: 01 PCN: 13-0089 5/10/2013





# PARTS LIST PART NO. DESCRIPTION QTY 030-1953 HALF HEX 4 POST S5 PLATFORM 2 036-1108 HARDWARE PACKAGE 1

SPECIFICATIONS

OST S5 PLATFORM: One piece platform a

<u>HALF HEX 4 POST S5 PLATFORM</u>: One piece platform all welded construction consisting of 12 GA surfaces, gussets, and corner plates. PVC coated after fabrication.

**HARDWARE PACKAGE: Stainless steel** 

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

SHIPPING WEIGHT: 287 LBS.

### **INSTALLATION INSTRUCTIONS**

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

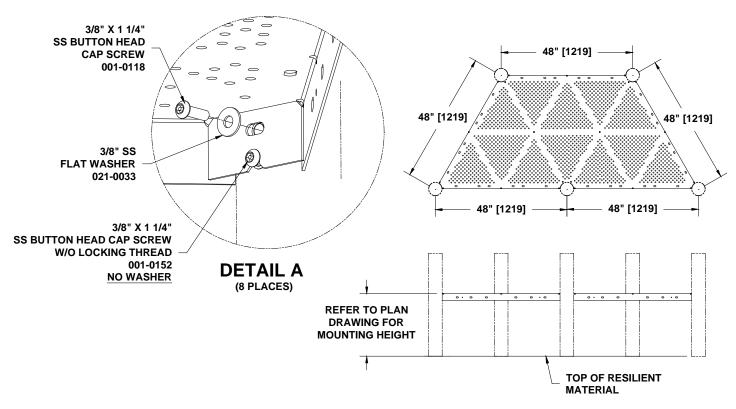
NOTE: Do not tighten hardware until instructed to do so.

- 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 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.

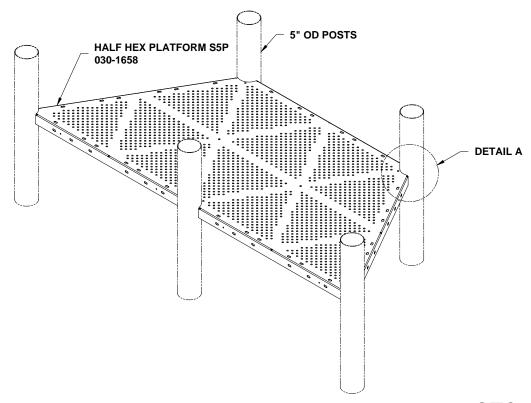
270-0131.doc Description: HEXAGONAL PLATFORM S5P

REV: 01 PCN: 13-0089 5/10/2013





### **ELEVATION VIEW**



## 270-0132 HALF HEXAGON PLATFORM S5P

# PARTS LIST PART NO. DESCRIPTION QTY 030-1658 HALF HEX PLATFORM S5P 1 036-1101 HARDWARE PACKAGE 2

### **SPECIFICATIONS**

HALF HEX PLATFORM S5P: 12 GA HRPO sheet, finished with a PVC Coating

HARDWARE PACKAGE: Stainless steel

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

SHIPPING WEIGHT: 144 LBS.

### **INSTALLATION INSTRUCTIONS**

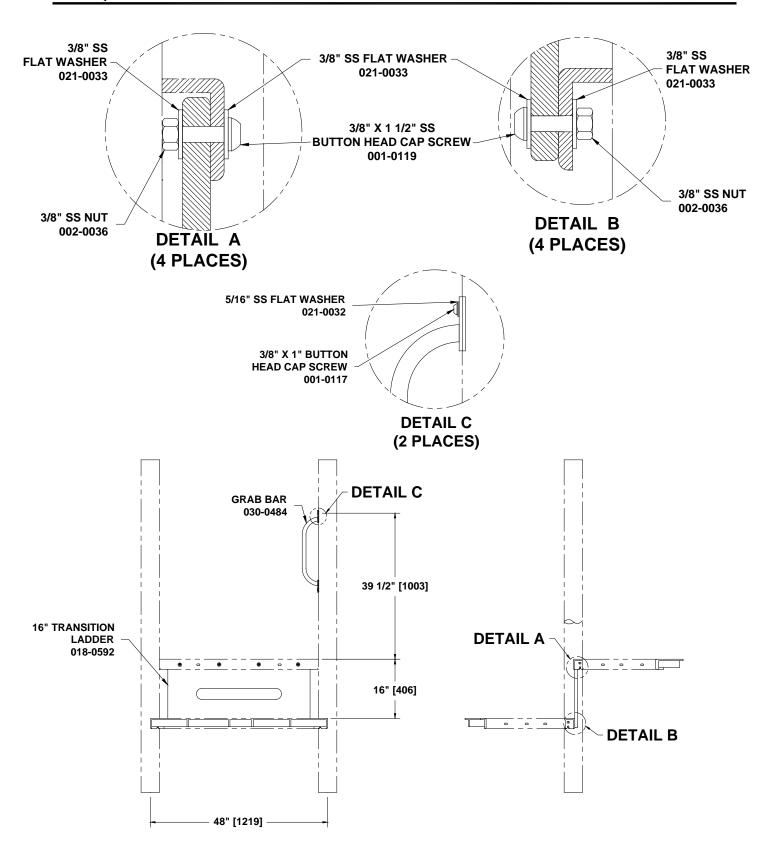
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 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 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





270-0185 16" PLATFORM LADDER

PARISLISI			
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>	
018-0592	16" TRANSITION LADDER	1	
030-0484	GRAB BAR	1	
036-0258	HARDWARE PACKAGE	1	
036-0448	HARDWARE PACKAGE	2	

16" TRANSITION LADDER: 3/4" HDPE

<u>GRAB BAR</u>: 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.

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

SHIPPING WEIGHT: 10 LBS.

### **INSTALLATION INSTRUCTIONS**

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

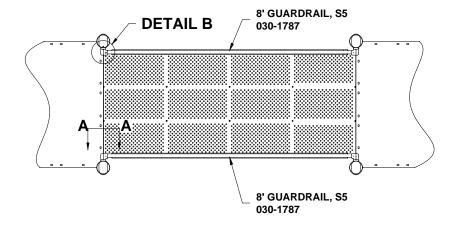
NOTE: Do not tighten hardware until instructed to do so.

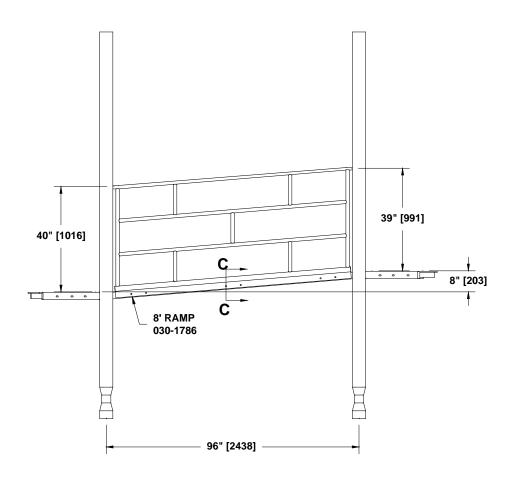
- 1. Attach 16" TRANSITION LADDER to upper and lower platform using 3/8" X 1 1/2" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. See DETAIL A and DETAIL B.
- Attach GRAB BAR using 3/8" X 1" SS button head cap screws and 5/16" SS flat washers.
   See DETAIL C.
- 3. Tighten all hardware.

270-0185.doc Description: PLATFORM LADDER 16"

REV: 01 PCN: 14-0266 10/28/14

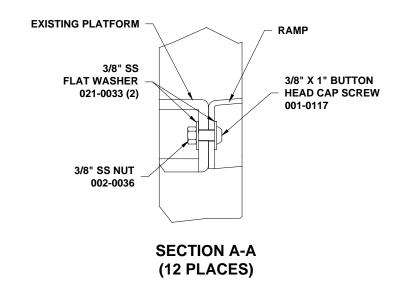


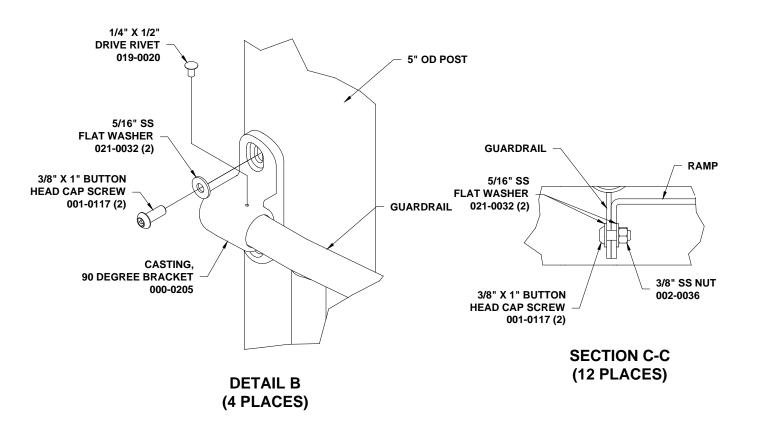




## 270-0221 8" RISE RAMP W/ GUARDRAILS







### 270-0221 8" RISE RAMP W/ GUARDRAILS

PAKISLISI			
PART NO.	<b>DESCRIPTION</b>	QTY	
000-0205	CASTING, 90 DEGREE BRACKET	4	
030-1786	8' RAMP	1	
030-1787	8' GUARDRAIL, S5	2	
036-1114	HARDWARE PACKAGE	1	

<u>CASTING, 90 DEGREE BRACKET</u>: 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.

<u>HARDWARE PACKAGE</u>: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.

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

SHIPPING WEIGHT: 356 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.

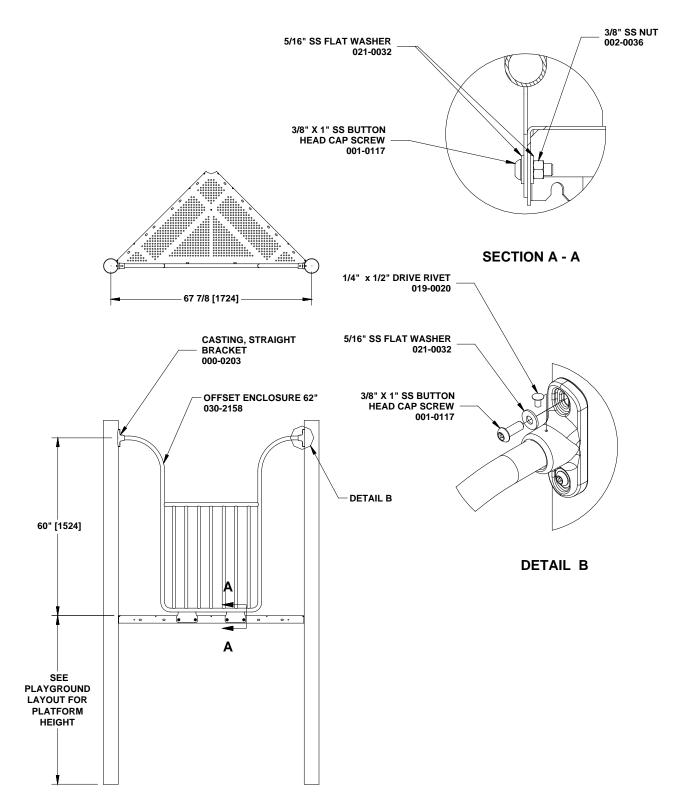
- 1. Determine location of 8" rise ramp.
- 2. Attach 8' RAMP to existing lower and upper platform using 3/8" X 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION A-A.
- 3. Attach 8' GUARDRAILS to ramp using 3/8" X 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. 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"

PART NO.	DESCRIPTION	<u>QTY</u>
000-0203	CASTING, STRAIGHT BRACKET	2
030-2158	CENTERED ENCLOSURE 62"	1
036-0258	HARDWARE PACKAGE	4
036-0806	HARDWARE PACKAGE	1
036-0819	HARDWARE PACKAGE	1

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

<u>CENTERED ENCLOSURE 62</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.

HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless

HARDWARE PACKAGE: Aluminum Rivets

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

SHIPPING WEIGHT: 43 LBS.

### **INSTALLATION INSTRUCTIONS**

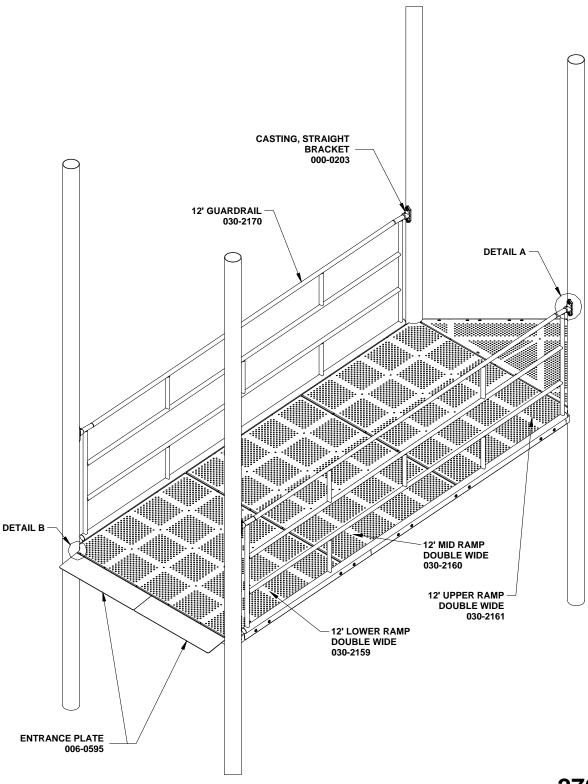
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

- 1. Locate holes for BRACKET CASTINGS on 5" O.D. posts as per dimensions shown.
- 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.

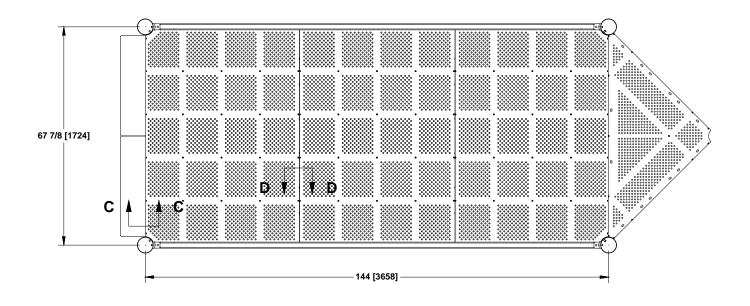
270-0268.doc Description: CENTERED ENCLOSURE 62"

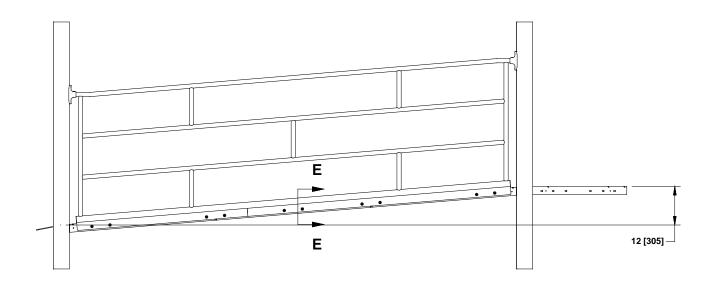
REV: 00 PCN: 12-0092 12/17/2012



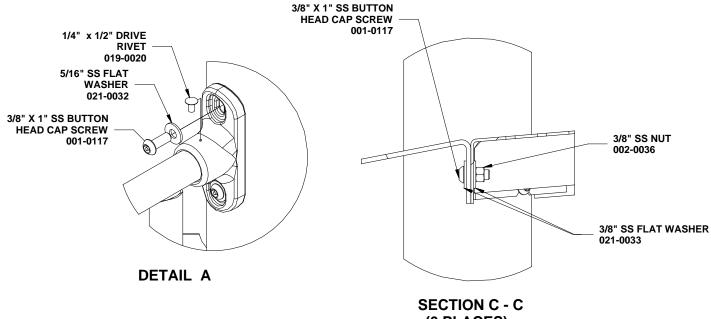


### 270-0272 DBLE WIDE RAMP 12" RISE ENTRANCE W/ GUARDRAIL

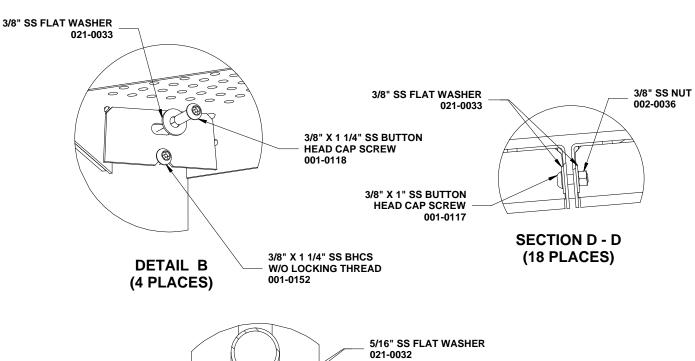


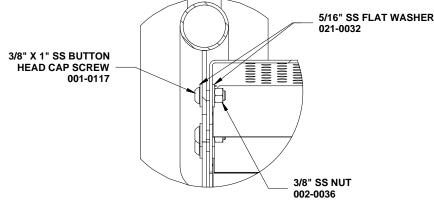


## 270-0272 DBLE WIDE RAMP 12" RISE ENTRANCE W/ GUARDRAIL



(6 PLACES)





**SECTION E - E** (20 PLACES)

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

PARTS LIST ———				
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>		
000-0203	CASTING, STRAIGHT BRACKET	4		
006-0595	ENTRANCE PLATE	2		
030-2159	12' LOWER RAMP DOUBLE WIDE	1		
030-2160	12' MID RAMP DOUBLE WIDE	1		
030-2161	12' UPPER RAMP DOUBLE WIDE	1		
030-2170	12' GUARDRAIL	2		
036-1115	HARDWARE PACKAGE	1		

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

#### **SPECIFICATIONS**

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

ENTRANCE PLATE: 7 GA HR steel. PVC coated after fabrication.

12' LOWER RAMP DOUBLE WIDE; 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.

12' GUARDRAIL: 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.

<u>HARDWARE PACKAGE</u>: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.

SHIPPING WEIGHT: 776 LBS.

#### INSTALLATION INSTRUCTIONS

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

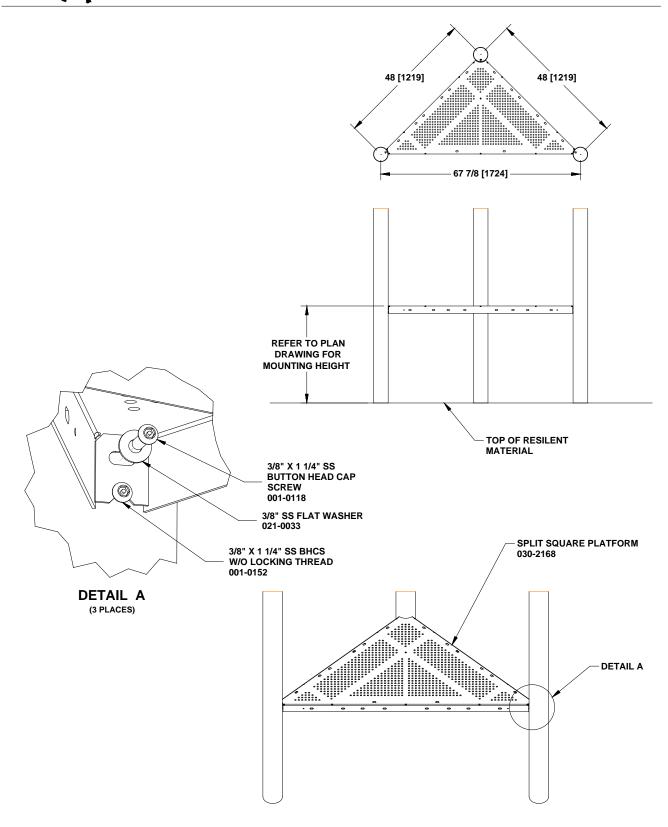
NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of 12" rise ramp.
- 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 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.
- 5. 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"

# PARTS LIST PART NO. DESCRIPTION QTY 030-2168 SPLIT SQUARE PLATFORM 1 036-1100 HARDWARE PACKAGE 1

SPECIFICATIONS

SPLIT SQUARE PLATFORM: 12 GA HRPO sheet, finished with a PVC Coating

HARDWARE PACKAGE: Stainless steel

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

SHIPPING WEIGHT: 48 LBS.

#### **INSTALLATION INSTRUCTIONS**

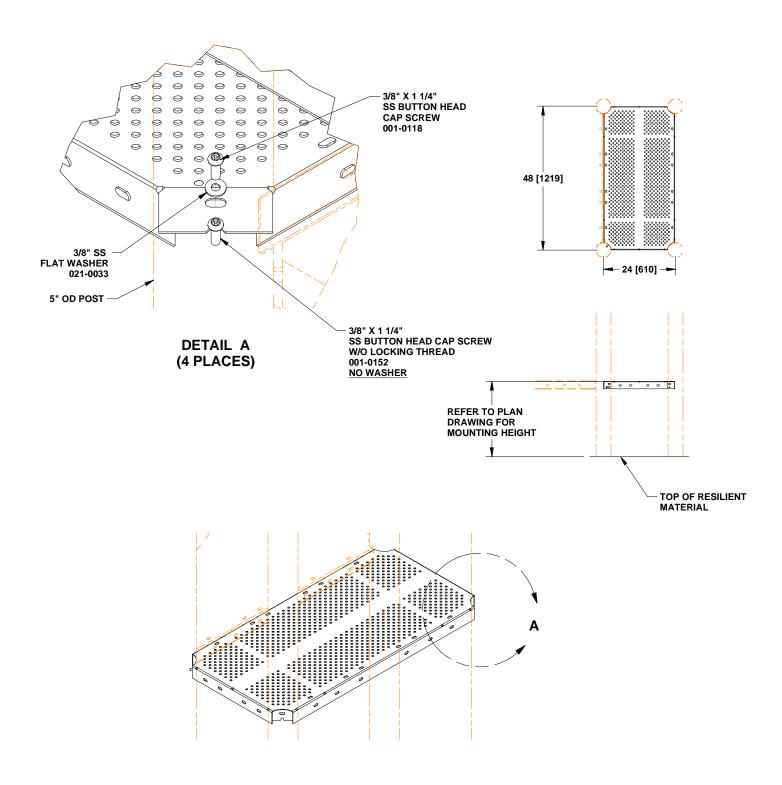
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Locate the double sets of platform mounting holes in each post.
- 2. Partially thread a 3/8" x 1 1/4" SS button head cap screw W/O LOCKING THREAD into the lower hole of the double set of mounting holes WITHOUT a washer. **DO NOT TIGHTEN**. See DETAIL A.
- 3. Slide the three corners of the 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.

270-0278.doc Description: SINGLE SPLIT SQUARE PLATFORM 62"

REV: 01 PCN: 13-0089 5/10/2013





### 270-0290 HALF PLATFORM

PARISLISI —			
PART NO.	DESCRIPTION	QTY	
030-2435	HALF PLATFORM	1	
036-1101	HARDWARE PACKAGE	1	

SPEC	IFICATI	ons =
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HALF PLATFORM: 12 GA HRPO sheet, finished with a PVC Coating

HARDWARE PACKAGE: Stainless steel

HANDWAKE I AOKAGE. Glainless steel

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

SHIPPING WEIGHT: 56.6 LBS.

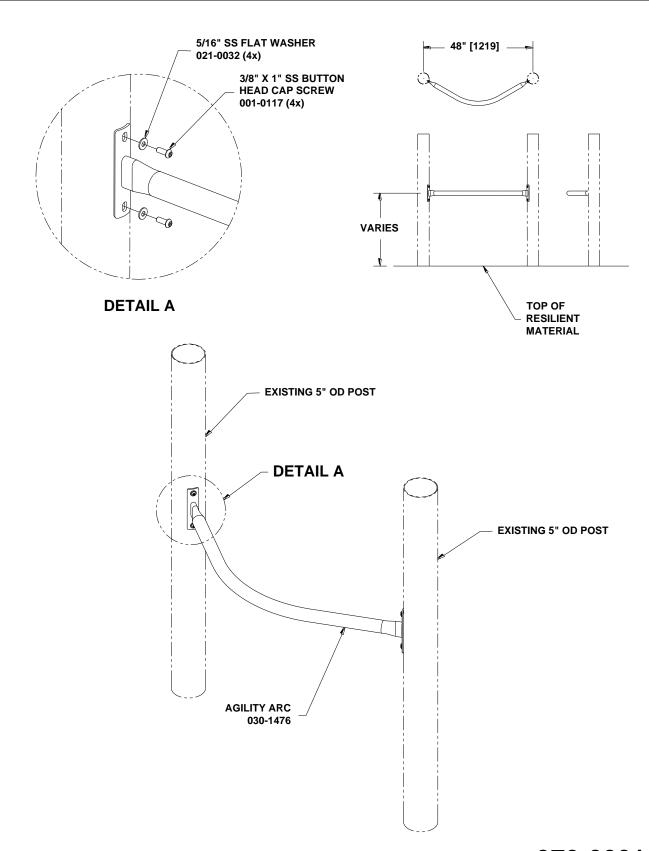
#### **INSTALLATION INSTRUCTIONS**

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.

270-0290 HALF PLATFORM REV: 00 PCN: 14-0110 9/25/2015





## 370-0001 AGILITY ARC

	PARTS LIST —	
PART NO.	DESCRIPTION	QTY
030-1476	AGILITY ARC	1
036-0258	HARDWARE PACKAGE	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.

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

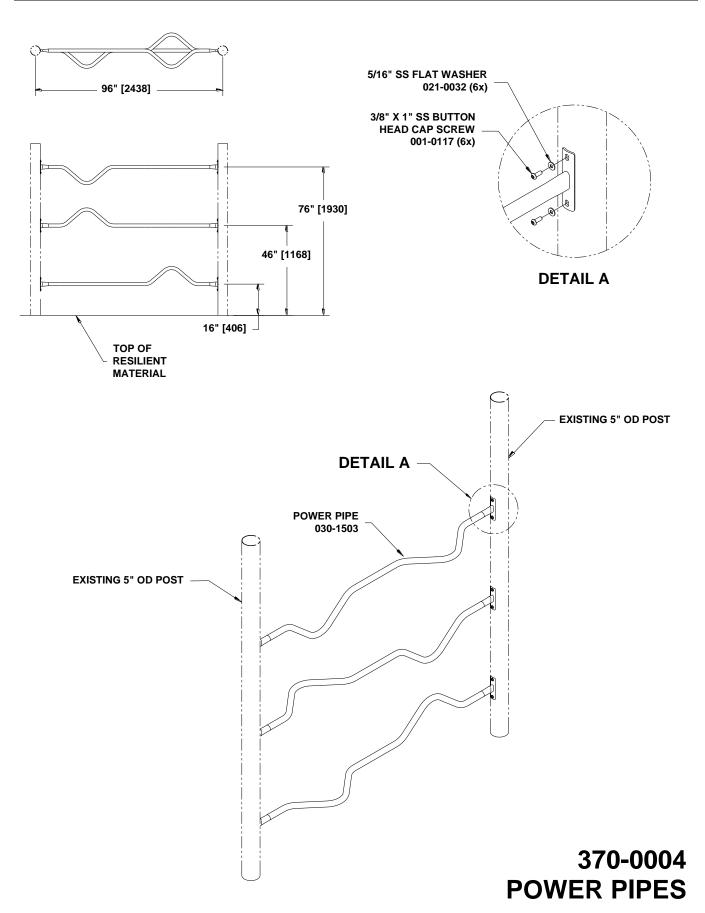
SHIPPING WEIGHT: 12 LBS.

#### **INSTALLATION INSTRUCTIONS**

- 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





	<u></u>	
PART NO.	PARTS LIST <u>DESCRIPTION</u>	<u>QTY</u>
030-1503 036-0258	POWER PIPE HARDWARE PACKAGE	3 6
	vare package(s) may include extra hardwar ecessary for this installation.	e

#### **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.

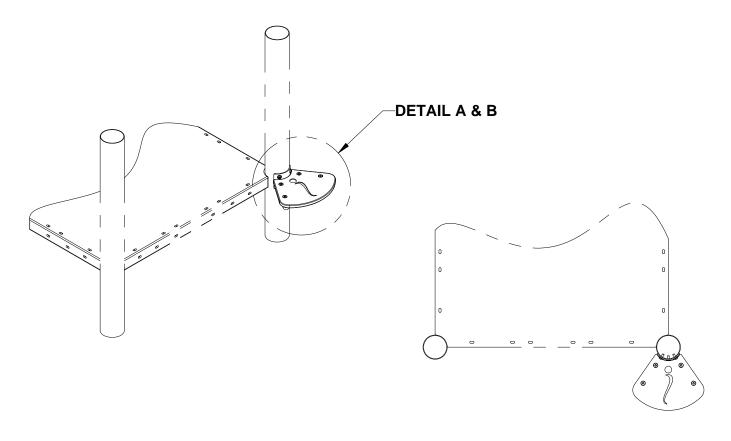
SHIPPING WEIGHT: 48 LBS.

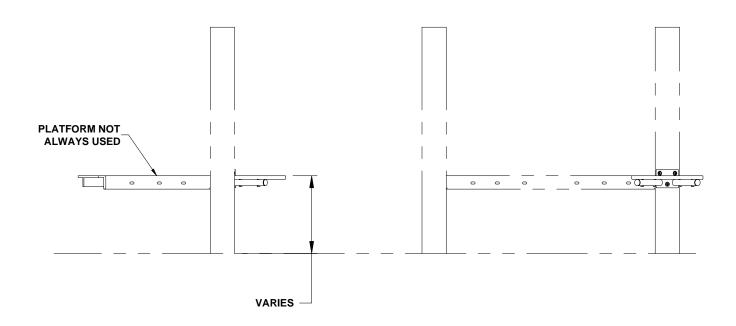
#### **INSTALLATION INSTRUCTIONS**

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

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

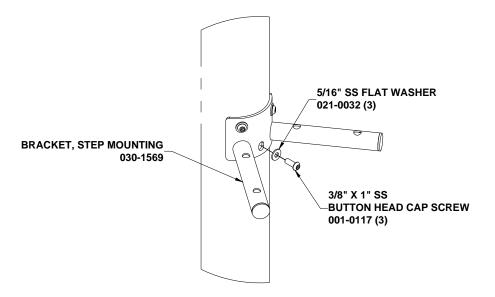




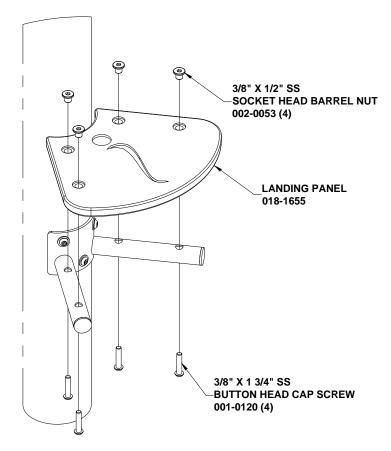


## 370-0027 LAUNCH PAD





**DETAIL A** 



**DETAIL B** 

## **370-0027 LAUNCH PAD**

FARTS LIST				
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>		
018-1655	LANDING PANEL	1		
030-1569	BRACKET, STEP MOUNTING	1		
036-0258	HARDWARE PACKAGE	2		
036-1014	HARDWARE PACKAGE	1		

DADTS I IST

#### **SPECIFICATIONS**

LANDING PANEL: 3/4" co-extruded HDPE.

BRACKET, STEP MOUNTING: One piece all welded construction consisting of 10 GA galvanized sheet steel, 7 GA stainless steel sheet and 1.315" OD x 12 GA galvanized steel tubing. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel.

<u>HARDWARE PACKAGE</u>: Stainless steel button head cap screws, washers, & barrel nuts.

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

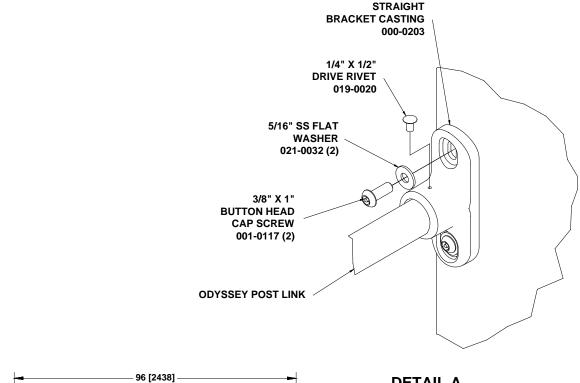
SHIPPING WEIGHT: 10 LBS.

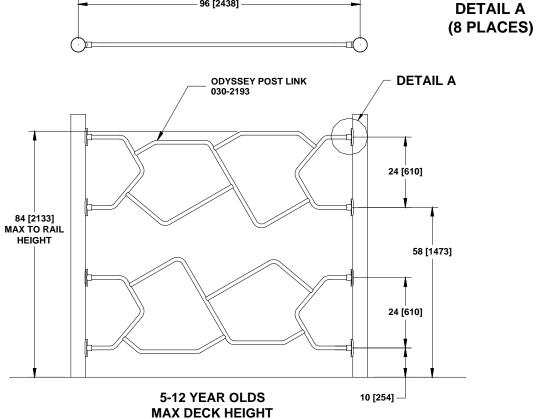
#### **INSTALLATION INSTRUCTIONS**

- 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.

370-0027.doc Description: LAUNCH PAD REV: 00 PCN: 10-0123 10/1/2010







IS 48" [1219]

370-0033 ODYSSEY POST LINK DOUBLE

DESCRIPTION	<u>QTY</u>
CASTING, STRAIGHT BRACKET	8
ODYSSEY POST LINK	2
HARDWARE PACKAGE	8
HARDWARE PACKAGE	4
	DESCRIPTION  CASTING, STRAIGHT BRACKET  ODYSSEY POST LINK  HARDWARE PACKAGE

#### SPECIFICATIONS

<u>CASTING, STRAIGHT BRACKET</u>: 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: Hardware package(s) may include extra hardware that is not necessary for this installation.

SHIPPING WEIGHT: 79 LBS.

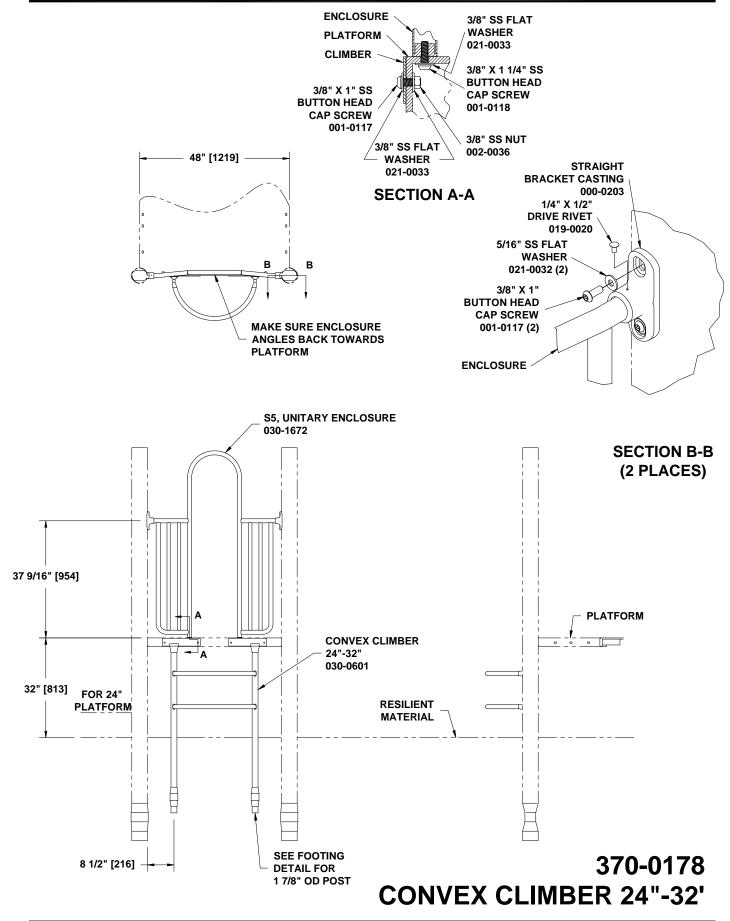
#### **INSTALLATION INSTRUCTIONS**

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

370-0033.doc Description: ODYSSEY POST LINK DOUBLE

REV: 00 PCN: 12-0167 12/3/2012





PARTS LIST ———					
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>			
000-0203	CASTING, STRAIGHT BRACKET	2			
030-0601	CONVEX CLIMBER 24"-32"	1			
030-1672	S5 UNITARY ENCLOSURE	1			
036-0018	HARDWARE PACKAGE	1			
036-0819	HARDWARE PACKAGE	1			

Note: Hardware package(s) may include extra hardware

that is not necessary for this installation.

#### **SPECIFICATIONS**

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

CONVEX CLIMBER 24"-32": One piece all welded construction consisting of 1.315" OD x 14 GA & 1.900" OD x 11 GA galvanized steel tubing, and 10 GA galvanized steel plate. Finished with a baked on powder coating.

<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.

HARDWARE PACKAGE: Stainless steel screws, washers and nuts.

HARDWARE PACKAGE: Aluminum Rivets

SHIPPING WEIGHT: 77 LBS.

#### INSTALLATION INSTRUCTIONS

<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)

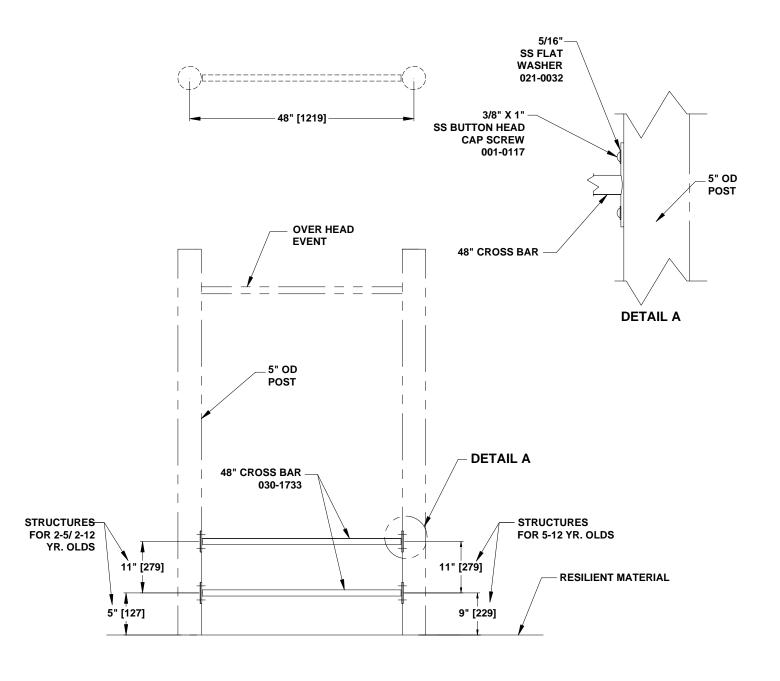
- 1. Locate and dig footing hole as per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Locate mounting holes for UNITARY ENCLOSURE on 5" O.D. posts.
- Set CASTING, S5, STRAIGHT BRACKET onto ends of UNITARY ENCLOSURE. Position 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.
- 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.





## **370-0247 END RUNGS**

PART NO.	PARTS LIST DESCRIPTION	<u>QTY</u>	
030-1733 036-0258		2 4	
Note: Hardware package(s) may include extra hardware that is not necessary for this installation.			

#### **SPECIFICATIONS**

48" CROSS BAR: 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.

HARDWARE PACKAGE: Stainless steel.

SHIPPING WEIGHT: 10 LBS.

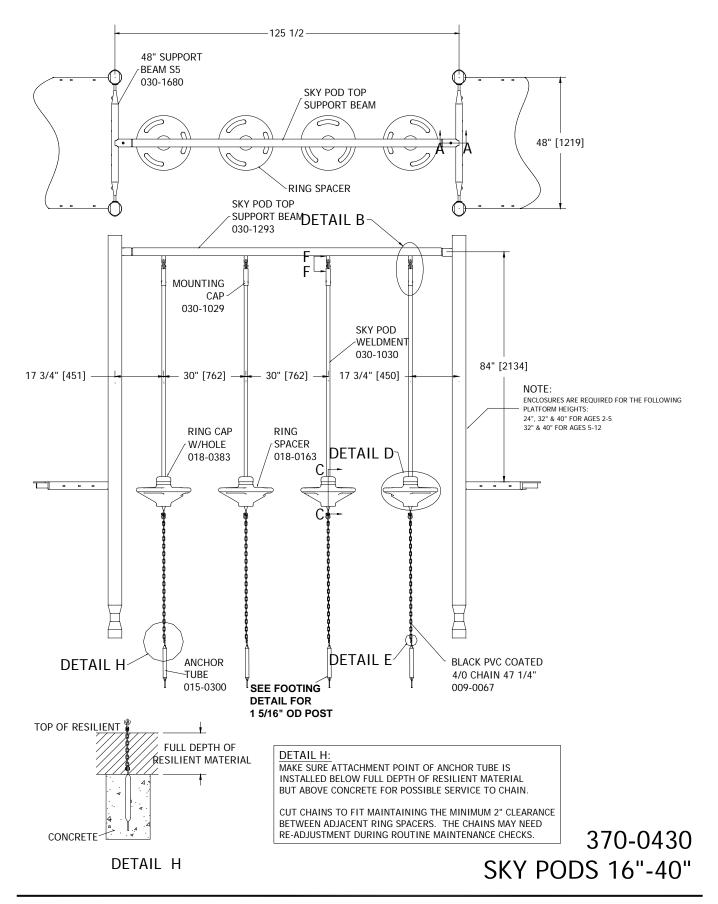
#### **INSTALLATION INSTRUCTIONS**

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.

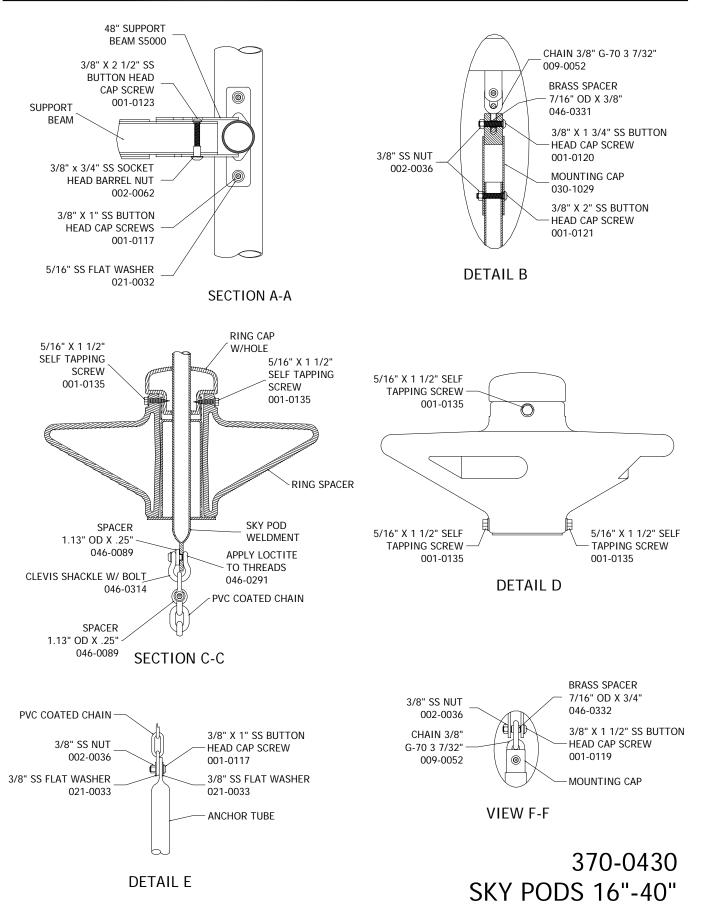
2. Install resilient surfacing material.

370-0247.doc Description: END RUNGS REV: 00 PCN: 09-0014 8/21/2009









PARTS LIST				
PART NO.	DESCRIPTION	<u>QTY</u>		
009-0052	CHAIN 3/8" G-70 3 7/32"	4		
009-0067	BLACK PVC COATED 4/0 CHAIN 47	4		
	1/4"			
015-0300	ANCHOR TUBE	4		
018-0163	RING SPACER	4		
018-0383	RING CAP W/HOLE	4		
030-1029	MOUNTING CAP	4		
030-1030	SKY POD WELDMENT	4		
030-1293	SKY POD TOP SUPPORT BEAM	1		
030-1680	SUPPORT BEAM 5" POSTS	2		
036-0734	HARDWARE PACKAGE	2		
036-0771	HARDWARE PACKAGE	2		
036-0785	HARDWARE PACKAGE	1		
036-0788	HARDWARE PACKAGE	4		
036-0828	HARDWARE PACKAGE	1		
046-0089	SPACER 1.13" OD X .25"	8		
046-0291	LOCTITE	1		
046-0331	BRASS SPACER 7/16" OD X 3/8"	4		
046-0332	BRASS SPACER 7/16" OD X 3/4"	4		

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

#### SPECIFICATIONS

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

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

RING SPACER: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction and a textured surface.

RING CAP W/HOLE: Linear, low density rotationally molded, U.V. stabilized, polyethylene, .250" thick, single wall construction. Textured outside surface.

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.

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 powder coating.

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.

SUPPORT BEAM 5" POSTS: 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 formed 3/16" stainless steel plates. Finished with a baked on powder coating.

<u>HARDWARE PACKAGE</u>: Stainless steel button head cap screws, nuts and flat washers; zinc plated steel he head cap screws, self tapping screws and lock washers.

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

HARDWARE PACKAGE: Stainless steel screws and washers.

HARDWARE PACKAGE: 5/16" Shackle with a 3/8" X 1 5/32" bolt

HARDWARE PACKAGE: Stainless steel.

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

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

BRASS SPACER 7/16" OD X 3/8"; BRASS SPACER 7/16" OD X 3/4": Brass Tube 7/16" OD X .028" Wall

**SHIPPING WEIGHT: 188 LBS.** 

#### INSTALLATION INSTRUCTIONS

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

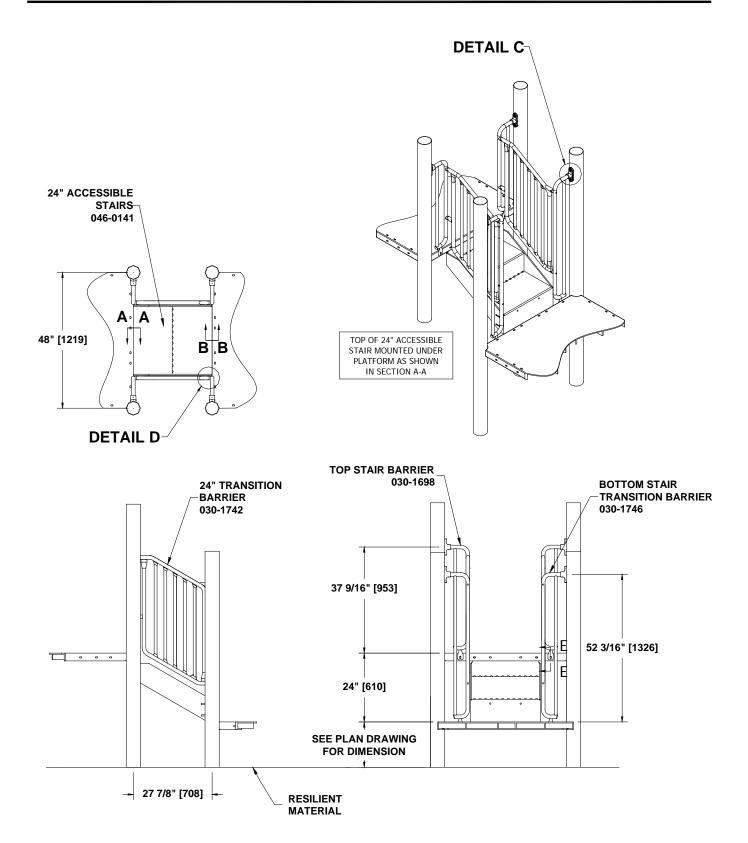
NOTE: Do not tighten hardware until instructed to do so.

- 1. Dig footing holes per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual.
- 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.
- 3. Insert the SKY POD TOP SUPPORT BEAM into the end of the first support beam. See SECTION A-A.
- 4. 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 button head cap screws and 5/16" SS flat washers. Tighten hardware. See SECTION A-A.
- 5. 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 Nut. Tighten hardware. See SECTION A-A.
- 6. 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 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.
- 9. 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 hardware. See DETAIL B.
- 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.
- 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"

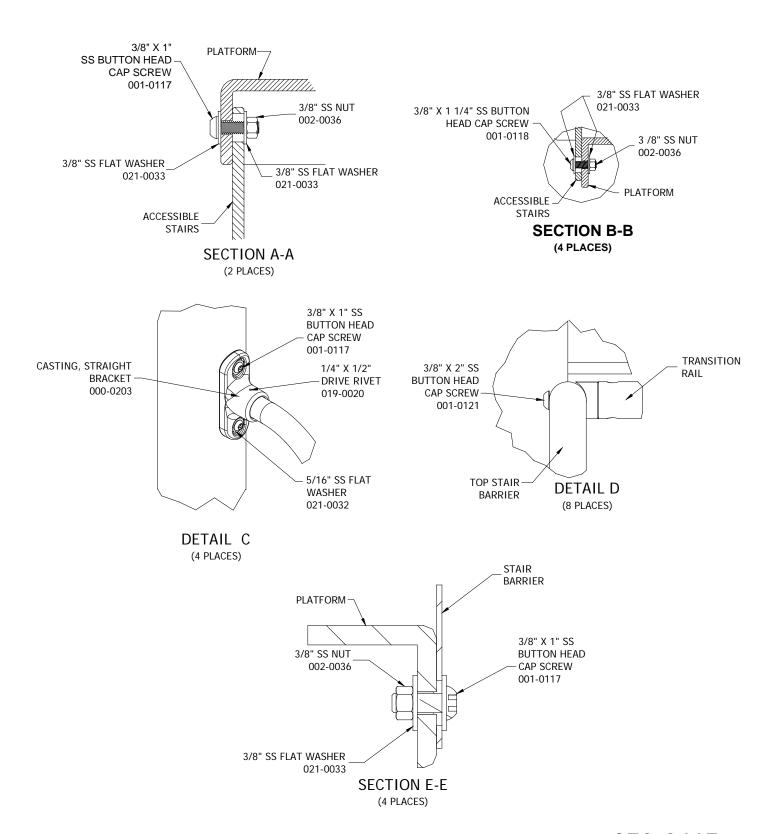
REV: 03 PCN: 13-0251 11/4/2013





370-0467 24" TRANSITION STAIR W/BARRIERS





### 370-0467 24" TRANSITION STAIR W/BARRIERS

	PARTS LIST	
PART NO.	DESCRIPTION	<u>QTY</u>
000-0203	CASTING, STRAIGHT BRACKET	4
030-1698	TOP STAIR BARRIER	2
030-1742	24" TRANSITION BARRIER	2
030-1746	BOTTOM STAIR TRANSITION	2
	BARRIER	
036-1125	HARDWARE PACKAGE	1
046-0141	24" ACCESSIBLE STAIRS	1
I		

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

#### SPECIFICATIONS

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

TOP STAIR 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.

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.

<u>HARDWARE PACKAGE</u>: 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.

**SHIPPING WEIGHT: 161 LBS.** 

#### INSTALLATION INSTRUCTIONS

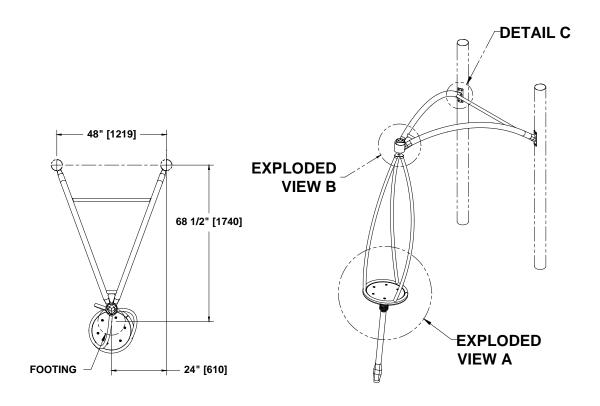
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

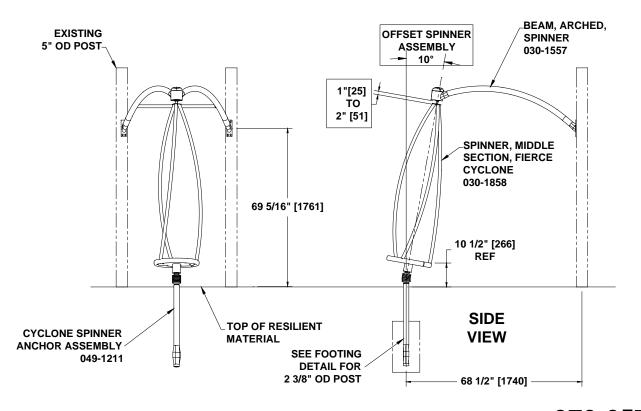
- 1. Install platforms. See appropriate installation instructions.
- 2. Attach 24" ACCESSIBLE STAIRS to upper platform using 3/8" x 1 " SS button head cap screw, 3/8" SS flat washers and 3/8" SS nuts. **NOTE: Make sure the stairs are centered between the posts.** See SECTION A-A.
- 3. Attach 24" accessible 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.
- 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.
- 6. Attach BOTTOM STAIR TRANSITION BARRIER to 24" TRANSITION BARRIER using 3/8" x 2" SS button head cap screws. See DETAIL D
- 7. 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.

370-0467.doc Description: 24" TRANSITION STAIR W/BARRIERS

REV: 01 PCN: 14-0013 2/4/2014

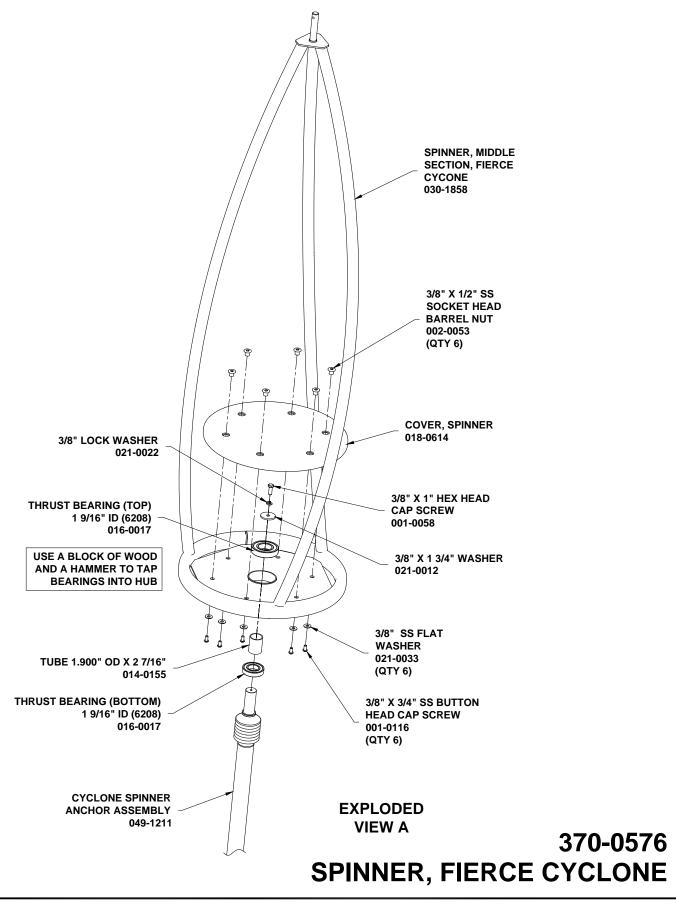




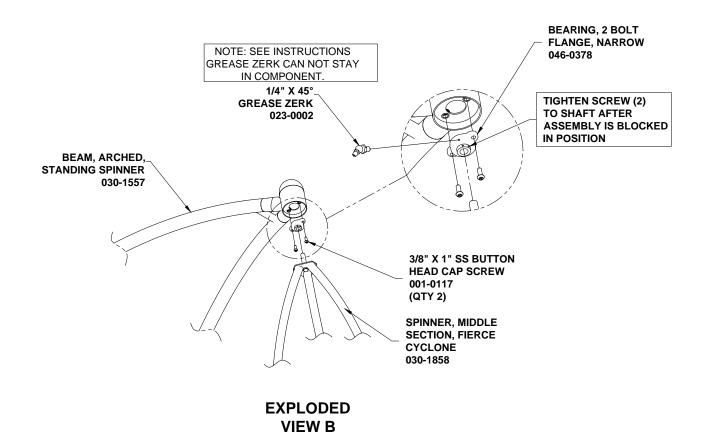


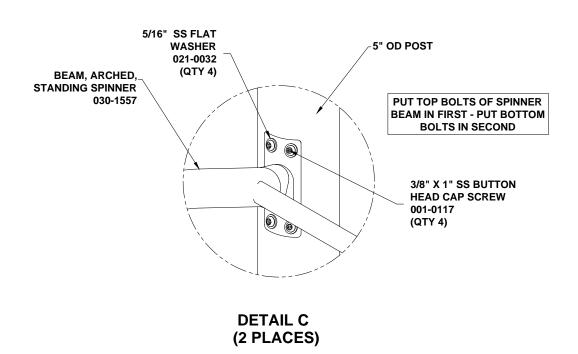
## 370-0576 SPINNER, FIERCE CYCLONE











## 370-0576 SPINNER, FIERCE CYCLONE

PART NO.	PARTS LIST <u>DESCRIPTION</u>	<u>QTY</u>
014-0155	TUBE, 1.900" OD X 11 GA X 2 7/16"	1
016-0017	THRUST BEARING 1 9/16" ID	2
018-0614	COVER, SPINNER	1
023-0002	1/4" X 45° GREASE ZERK	1
030-1557	BEAM, ARCHED, SPINNER	1
030-1858	SPINNER, MIDDLE SECTION,	1
	FIERCE CYCLONE	
036-0258	HARDWARE PACKAGE	5
036-0815	HARDWARE PACKAGE	2
036-1013	HARDWARE PACKAGE	2
046-0378	BEARING, 2 BOLT FLANGE,	1
049-1211	NARROW CYCLONE SPINNER ANCHOR ASSEMBLY	1

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

#### **SPECIFICATIONS**

TUBE, 1.900" OD X 11 GA X 2 7/16": 1.900" OD x 11 GA galvanized steel tube.

THRUST BEARING 1 9/16" ID: Heavy duty, precision thrust, sealed ball bearing.

COVER, SPINNER: 3/4" extruded HDPE

1/4" X 45° GREASE ZERK: Zinc plated steel.

BEAM, ARCHED, SPINNER: One piece all welded construction consisting of 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.

SPINNER, MIDDLE SECTION, FIERCE CYCLONE: One piece all welded 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 steel plate. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel.

HARDWARE PACKAGE: Stainless Steel.

HARDWARE PACKAGE: Stainless steel button head cap screws, washers, & barrel nuts .

<u>BEARING. 2 BOLT FLANGE, NARROW</u>: 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.

SHIPPING WEIGHT: 150 LBS.

#### INSTALLATION INSTRUCTIONS

- 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.
- 3. 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.

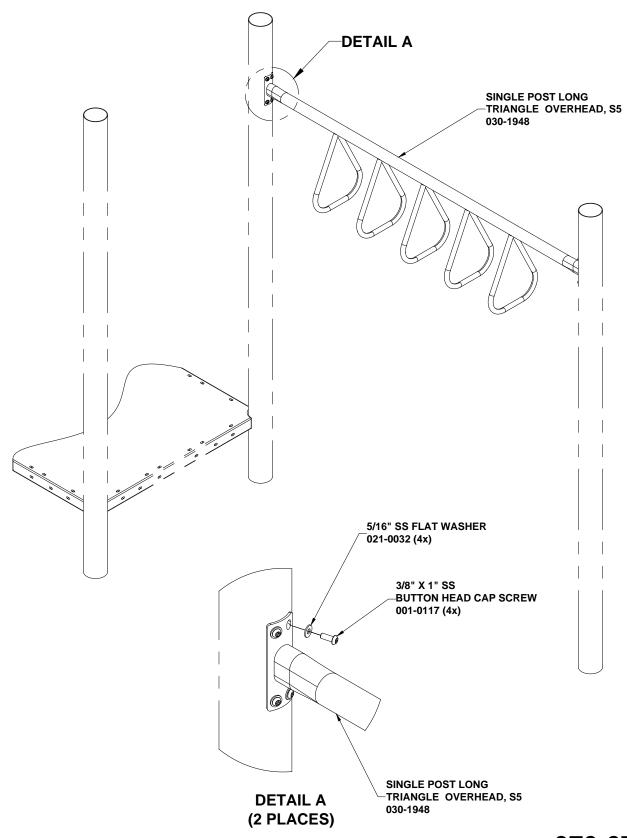
NOTE: Keep grease zerk in a safe place and save for next maintenance period.

- 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.
- 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

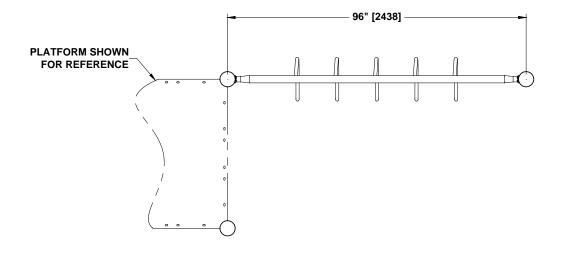
REV: 04 PCN: 16-0288 12/29/2016

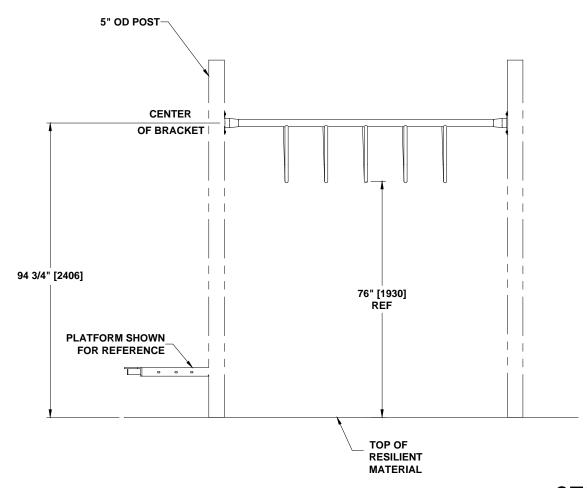




370-0710 TRIANGLE TRAVERSE







## 370-0710 TRIANGLE TRAVERSE

PART NO.	DESCRIPTION	<u>QTY</u>	
030-1948	SINGLE POST LONG TRIANGLE OVERHEAD, S5	1	
036-0258	HARDWARE PACKAGE	4	

DADTS LIST

#### SPECIFICATIONS

SINGLE POST LONG TRIANGLE OVERHEAD, S5: One piece all welded construction consisting of 2.375" x 12 GA, 1.029" OD X 14 GA galvanized steel tubing & 7 GA Stainless Steel Sheet. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel.

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

SHIPPING WEIGHT: 41 LBS.

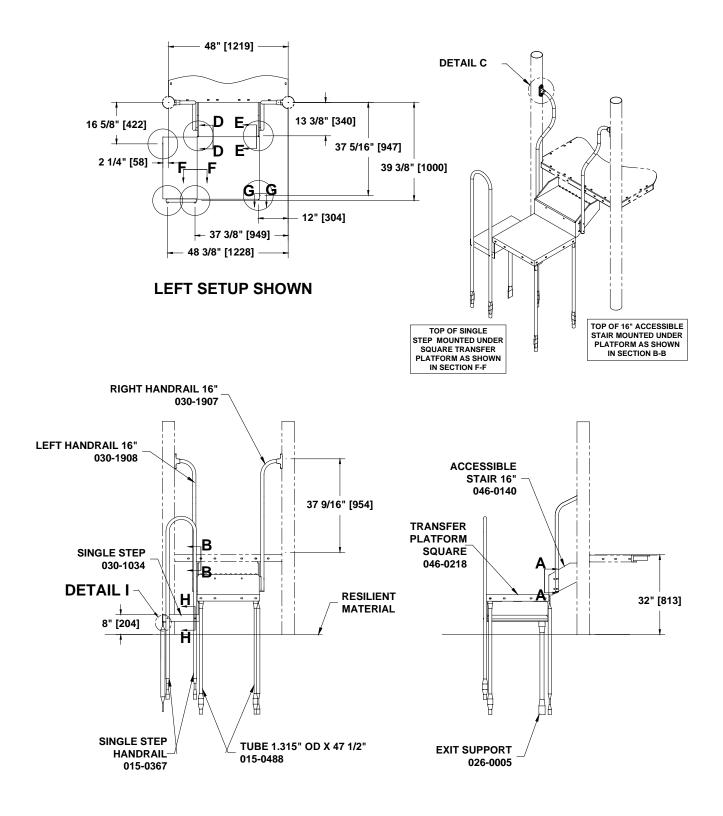
#### **INSTALLATION INSTRUCTIONS**

- 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.

370-0710.doc Description: TRIANGLE TRAVERSE

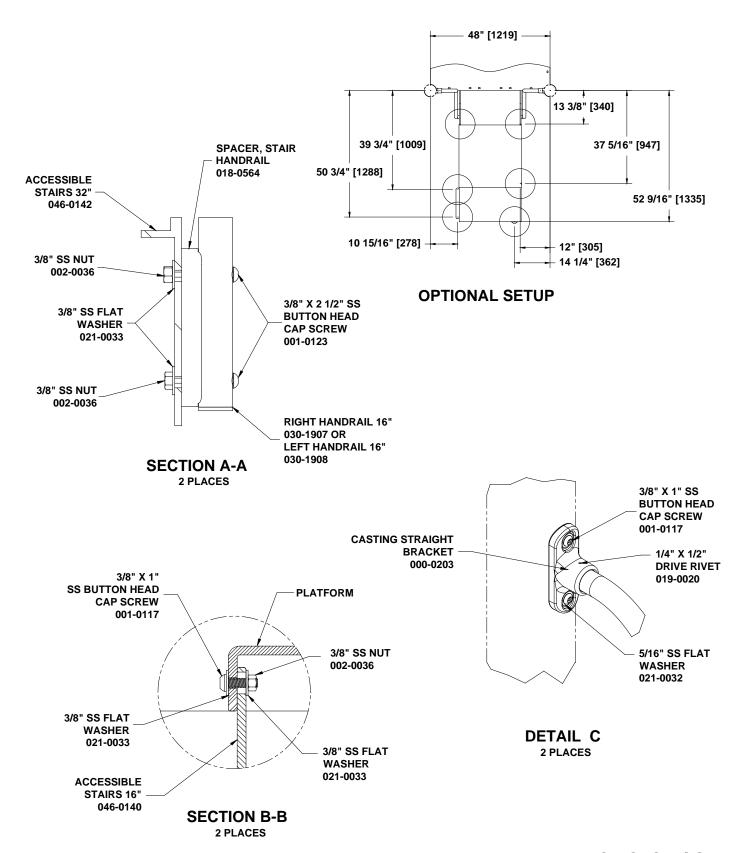
REV: 02 PCN: 17-0009 1/17/2017





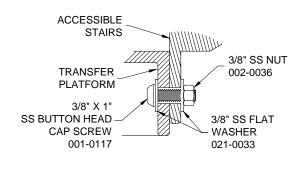
## 370-0718 TRANSFER STATION, HANDRAIL 32"



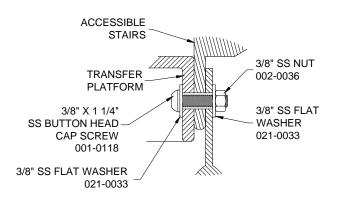


### 370-0718 TRANSFER STATION, HANDRAIL 32"

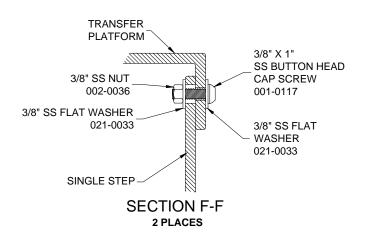


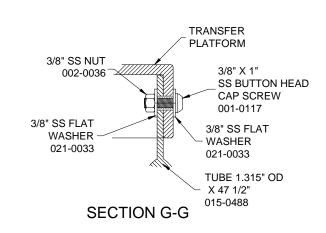


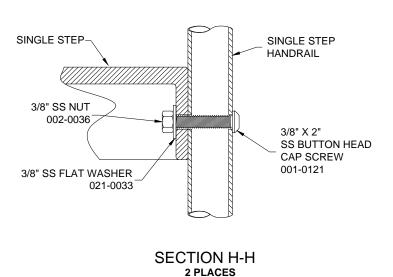
**SECTION D-D** 

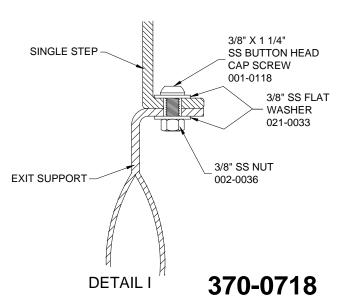


SECTION E-E 2 PLACES









**TRANSFER STATION, HANRAIL 32"** 

		PARTS LIST ———	
	PART NO.	<u>DESCRIPTION</u>	<u>QTY</u>
	000-0203	CASTING, STRAIGHT BRACKET	2
	015-0367	SINGLE STEP HANDRAIL	1
	015-0488	TUBE 1.315" OD X 47 1/2"	3
	018-0564	SPACER, STAIR HANDRAIL	2
	026-0005	SUPPORT, EXIT, 37.29"	1
	030-1034	SINGLE STEP	1
	030-1907	RIGHT HANDRAIL 16"	1
	030-1908	LEFT HANDRAIL 16"	1
	036-1123	HARDWARE PACKAGE	1
	046-0140	16" ACCESSIBLE STAIRS	1
	046-0218	SQUARE TRANSFER PLATFORM	1
ı			

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

#### SPECIFICATIONS

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

SINGLE STEP HANDRAIL: Formed 1.315" OD x 12 GA galvanized steel tubing finished with a baked on powder coating.

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

SPACER, STAIR HANDRAIL: 3/4" extruded HDPE.

<u>SUPPORT, EXIT, 37.29</u>": 1.660" OD x 13 GA galvanized steel tubing finished with a baked on powder coating.

<u>SINGLE STEP</u>: One piece all welded construction consisting of 12 GA surfaces and gussets. PVC coated after fabrication.

RIGHT HANDRAIL 16"; LEFT HANDRAIL 16": Formed 1.315" OD x 12 GA galvanized steel tubing finished with a baked on powder coating.

<u>HARDWARE PACKAGE</u>: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.

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

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

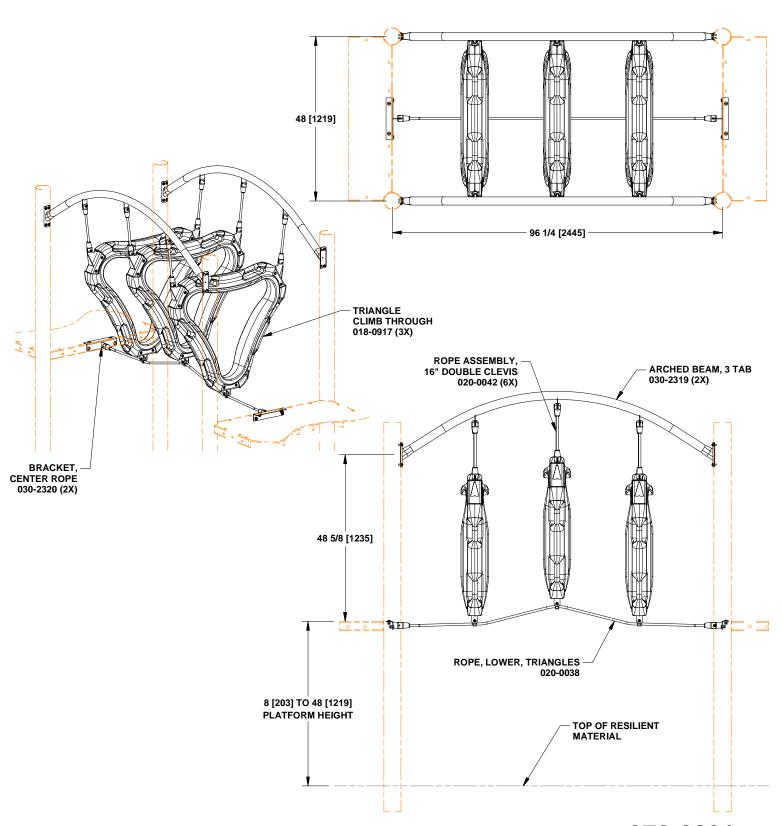
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 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.
- 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.
- 6. 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.
- 7. 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 C.
- 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.

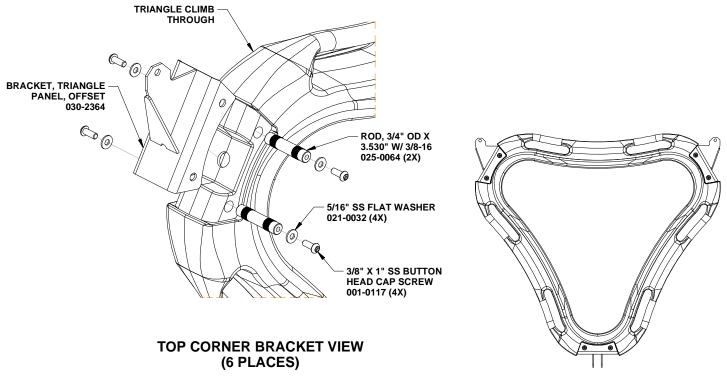
370-0718.doc Description: TRANSFER STATION, HANDRAIL 32"

REV: 02 PCN: 14-0013 2/4/2014

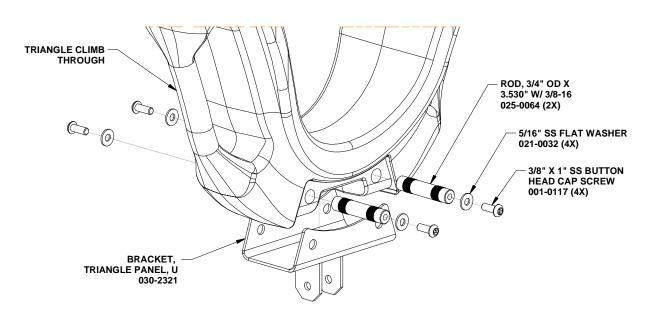






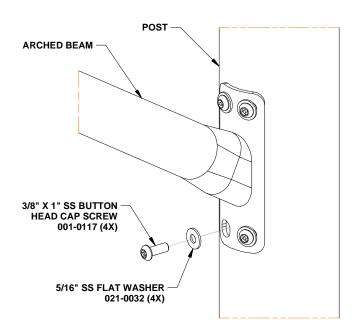


TRIANGLE BRACKET VIEW

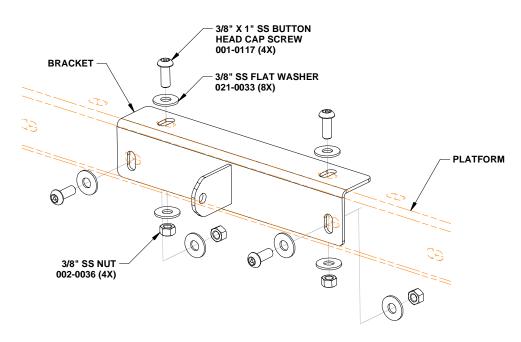


BOTTOM CORNER BRACKET VIEW (3 PLACES)



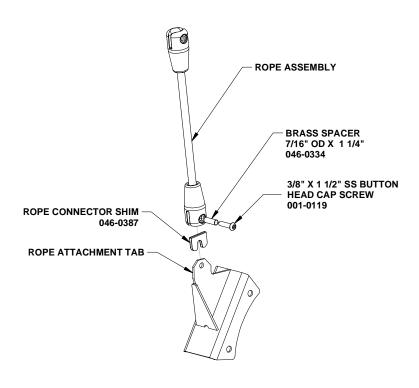


ARCH TO POST VIEW (4 PLACES)

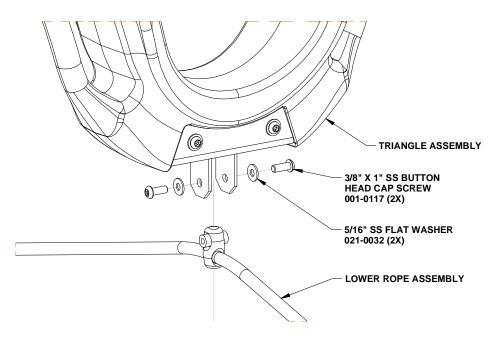


PLATFORM BRACKET VIEW (2 PLACES)





### ROPE CONNECTION VIEW (14 PLACES)



LOWER ROPE CONNECTION VIEW (3 PLACES)

	PARTS LIST	
PART N	O. DESCRIPTION	<u>YTÇ</u>
018-0917	TRIANGLE CLIMB THROUGH	3
020-0038	ROPE, LOWER, TRIANGLES	1
020-0042	ROPE ASSEMBLY, 16" DOUBLE CLEVIS	6
025-0064	ROD, 3/4" OD X 3.530" W/ 3/8-16	18
	ARCHED BEAM, 3 TAB	2
030-2320	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

**NOTE:** 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.

ROPE, LOWER, TRIANGLES: 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.

ROPE ASSEMBLY, 16" DOUBLE CLEVIS: 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 PANEL, OFFSET: 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.

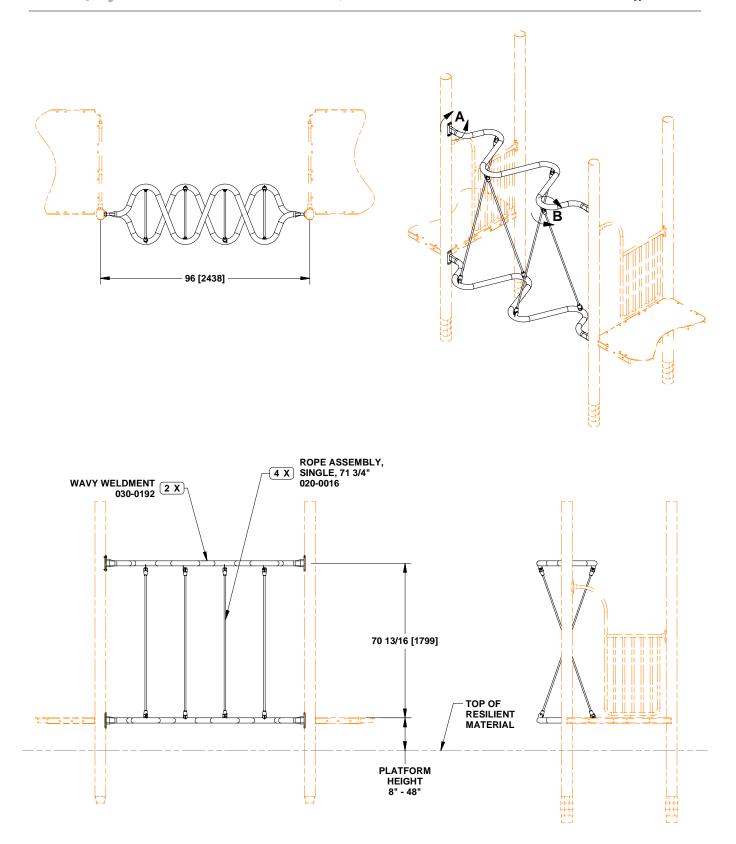
#### **INSTALLATION INSTRUCTIONS**

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.
- 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
- 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.

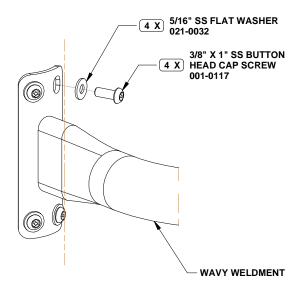
370-0801 TRIGON ARCH LINK, 8"-48" REV: 02 PCN: 14-0238 9/11/2015



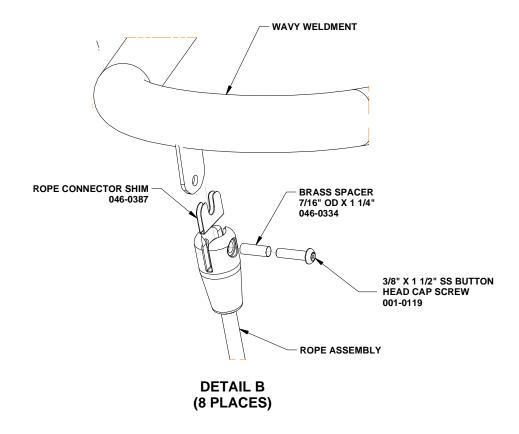


### 370-0808 TWISTING TRAVERSE





DETAIL A (4 PLACES)



### 370-0808 TWISTING TRAVERSE

	PARISLISI	
PART NO.	DESCRIPTION	QTY
020-0016	ROPE ASSEMBLY, SINGLE, 71 3/4"	4
030-0192	WAVY WELDMENT	2
036-0818	INTENSITY SHIM PACKAGE	2
036-1311	HARDWARE PACKAGE	3
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	8

#### **SPECIFICATIONS**

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.

 $\frac{\text{WAVY WELDMENT:}}{12\text{ GA galvanized steel tubing, 7 GA stainless steel sheet \& 8 GA galanized steel sheet. Finished with a baked on powder coating.}$ 

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

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

SHIPPING WEIGHT: 103 LBS.

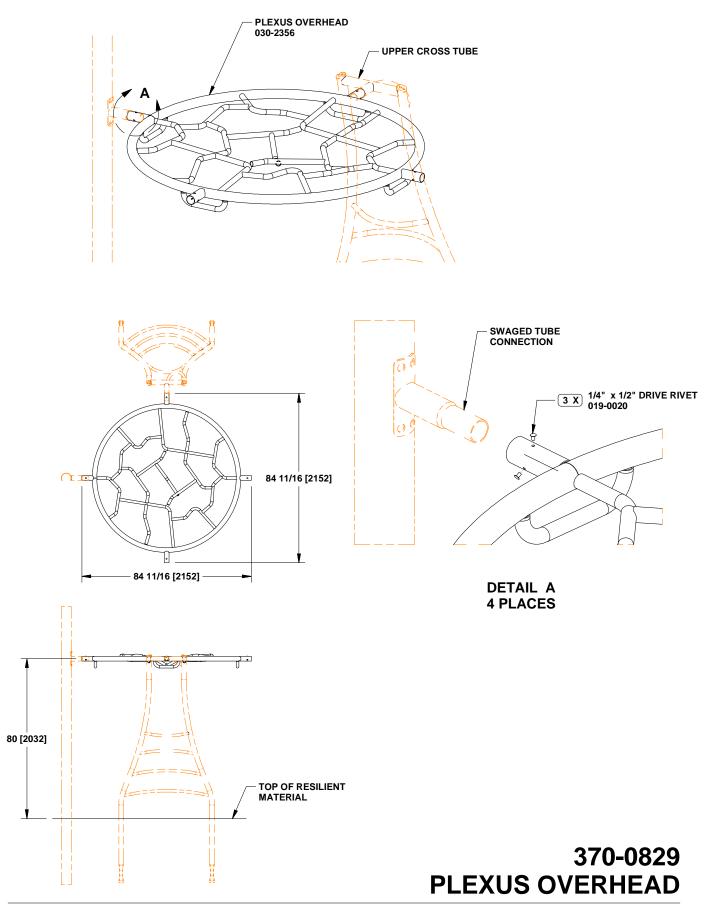
#### **INSTALLATION INSTRUCTIONS**

NOTE: Do not tighten hardware until instructed 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.

370-0808 TWISTING TRAVERSE REV: 00 PCN: 14-0053 6/6/2014





PART NO.	DESCRIPTION	QTY
030-2356	PLEXUS OVERHEAD	1
036-1184	HARDWARE PACKAGE	3

#### **SPECIFICATIONS**

PLEXUS OVERHEAD: One piece all welded construction consisting of

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.

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

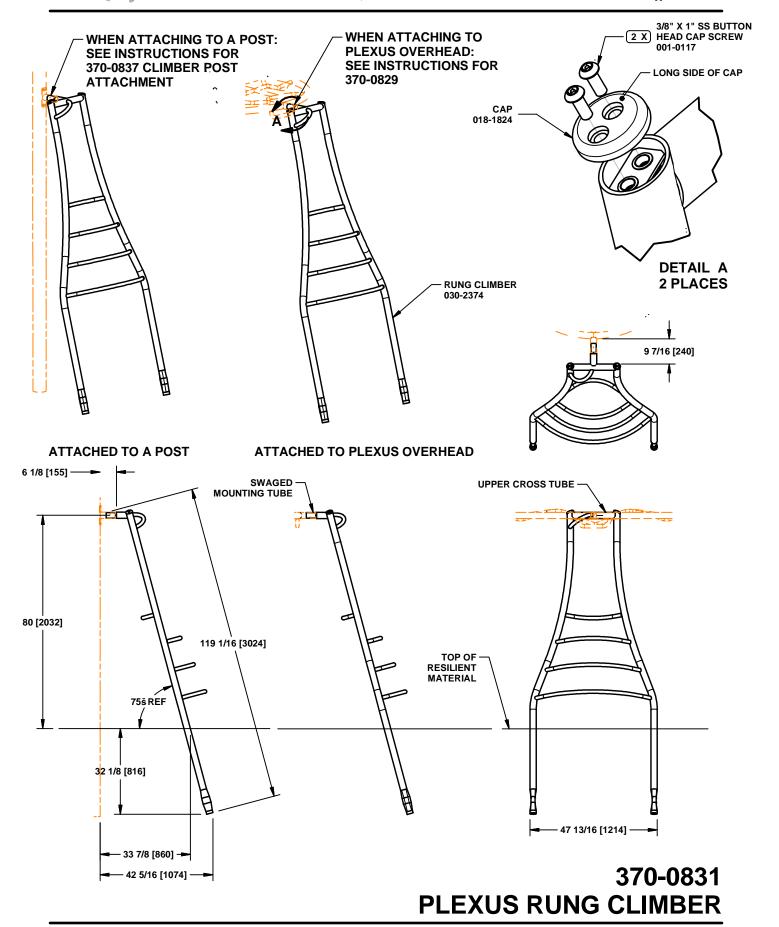
SHIPPING WEIGHT: 96 LBS.

#### **INSTALLATION INSTRUCTIONS**

- 1. Determine location of Plexus Overhead and four attached components from site plan.
- 2. 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.

370-0829 PLEXUS OVERHEAD REV: 00 PCN: 14-0093 12/23/2014





PART NO.	DESCRIPTION	<u>QTY</u>
018-1824	CAP	2
030-2374	RUNG CLIMBER	1
036-0258	HARDWARE PACKAGE	2

#### **SPECIFICATIONS**

CAP: 3/4" Extruded HDPE

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

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

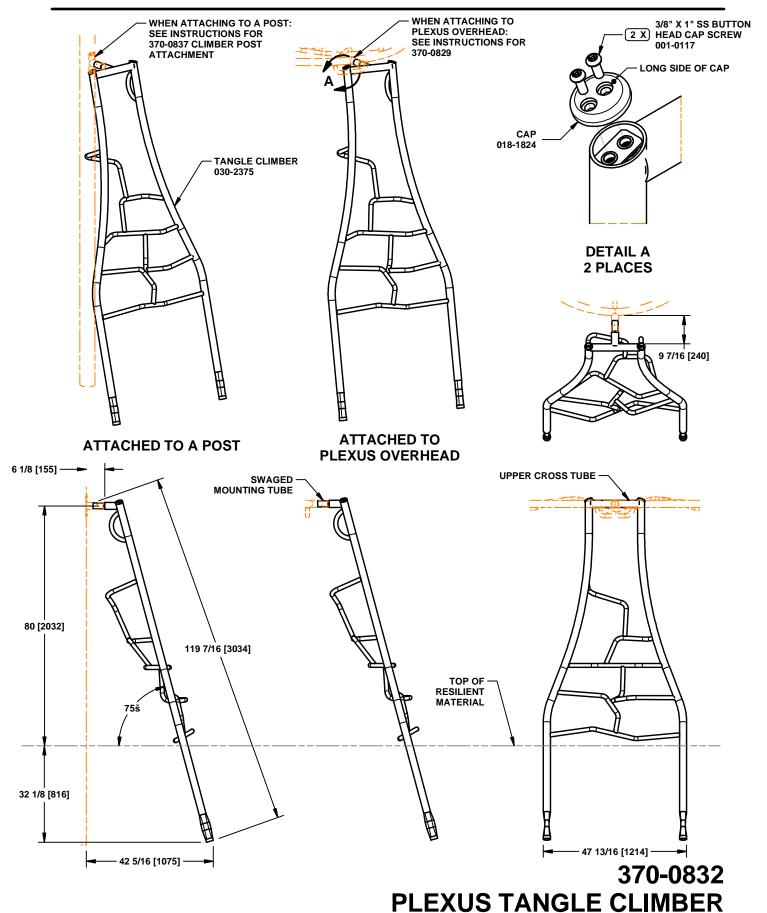
SHIPPING WEIGHT: 83 LBS.

#### **INSTALLATION INSTRUCTIONS**

- 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.

370-0831 PLEXUS RUNG CLIMBER REV: 01 PCN: 17-0009 1/18/2017





PART NO.	DESCRIPTION	<u>QTY</u>
018-1824	CAP	2
030-2375	TANGLE CLIMBER	1
036-0258	HARDWARE PACKAGE	2

#### **SPECIFICATIONS**

CAP: 3/4" Extruded HDPE

TANGLE 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

<u>NOTE:</u> Hardware package(s) may include extra hardware that is not necessary for this installation.

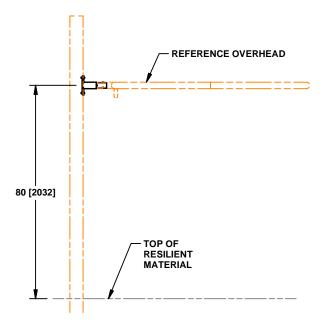
SHIPPING WEIGHT: 89 LBS.

#### **INSTALLATION INSTRUCTIONS**

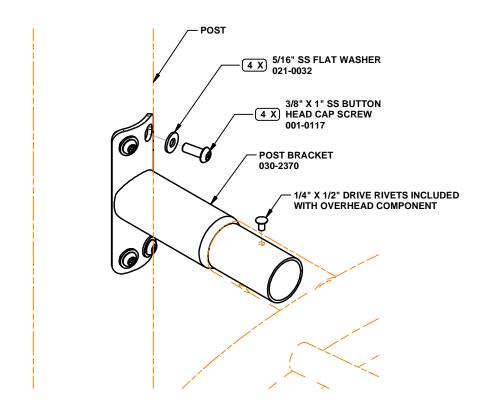
- 1. Determine location of climber from site plan and dig footing holes accordingly. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Attach CAP(s) to TANGLE CLIMBER with hardware specified in DETAIL A. Make sure the long side of the cap is oriented 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.

370-0832 PLEXUS TANGLE CLIMBER REV: 01 PCN: 17-0009 1/19/2017





**ELEVATION VIEW** 



**ASSEMBLY VIEW** 

### 370-0834 OVERHEAD POST ATTACHMENT

PART NO.	DESCRIPTION	<u>QTY</u>
030-2370	POST BRACKET	1
036-0258	HARDWARE PACKAGE	2

## ACKET: One piece all welded construction consisting

<u>POST BRACKET:</u> 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.

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

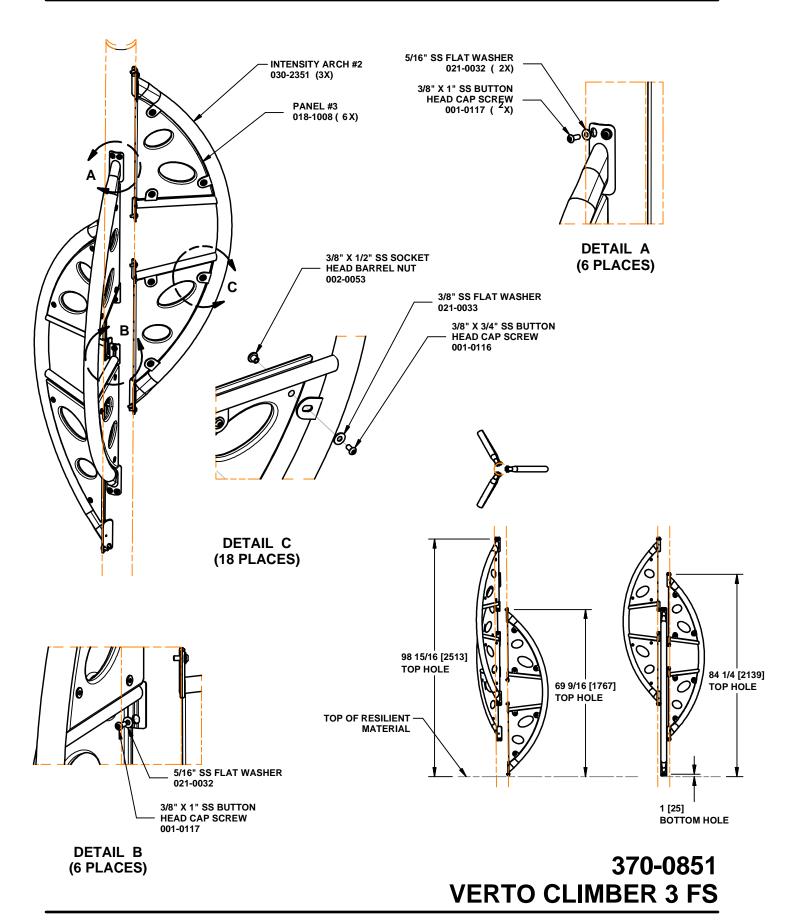
SHIPPING WEIGHT: 3 LBS.

#### **INSTALLATION INSTRUCTIONS**

- 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.

370-0834 OVERHEAD POST ATTACHMENT REV: 01 PCN: 17-0009 1/19/2017





	IANIOLIOI	
PART NO.	DESCRIPTION	<u>QTY</u>
018-1008	PANEL #3	6
030-2351	INTENSITY ARCH #2	3
036-0258	HARDWARE PACKAGE	3
036-1416	HARDWARE PACKAGE	3

#### **SPECIFICATIONS**

PANEL #3: 3/4" extruded HDPE.

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.

<u>NOTE:</u> Hardware package(s) may include extra hardware that is not necessary for this installation.

SHIPPING WEIGHT: 103 LBS.

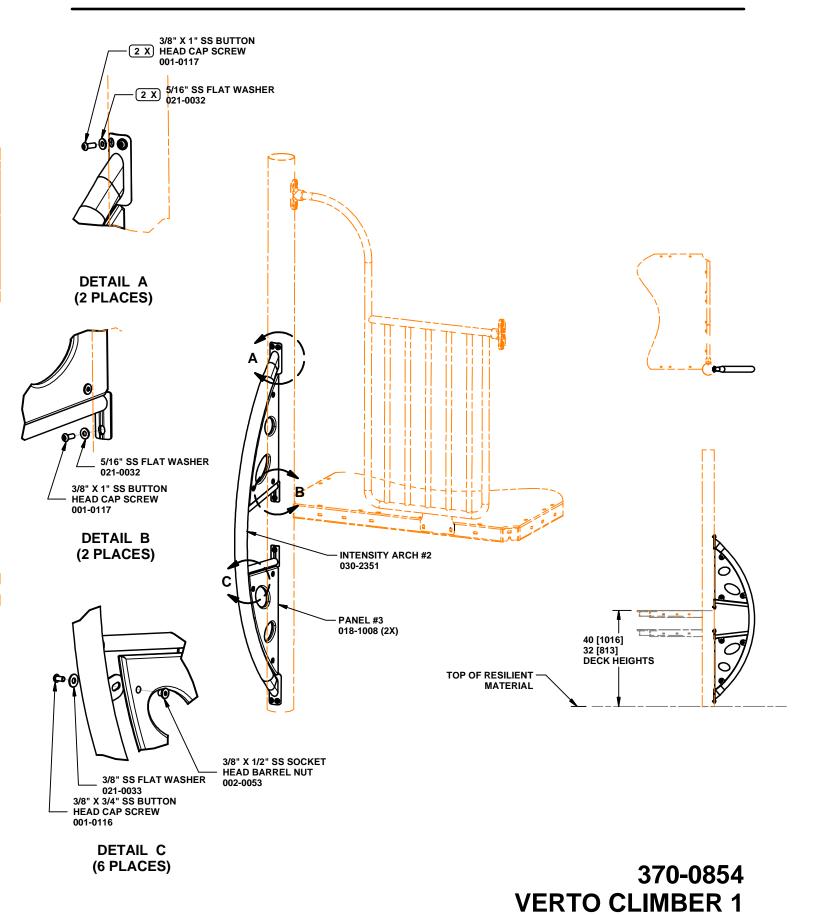
#### **INSTALLATION INSTRUCTIONS**

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.

370-0851 VERTO CLIMBER 3 FS REV: 01 PCN: 17-0009 1/19/2017





PARTS LIST			
PART NO.	DESCRIPTION	<u>QTY</u>	
018-1008	PANEL #3	2	
030-2351	INTENSITY ARCH #2	1	
036-0258	HARDWARE PACKAGE	1	
036-1416	HARDWARE PACKAGE	1	

#### **SPECIFICATIONS**

PANEL #3: 3/4" extruded HDPE.

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.

<u>NOTE:</u> Hardware package(s) may include extra hardware that is not necessary for this installation.

SHIPPING WEIGHT: 35 LBS.

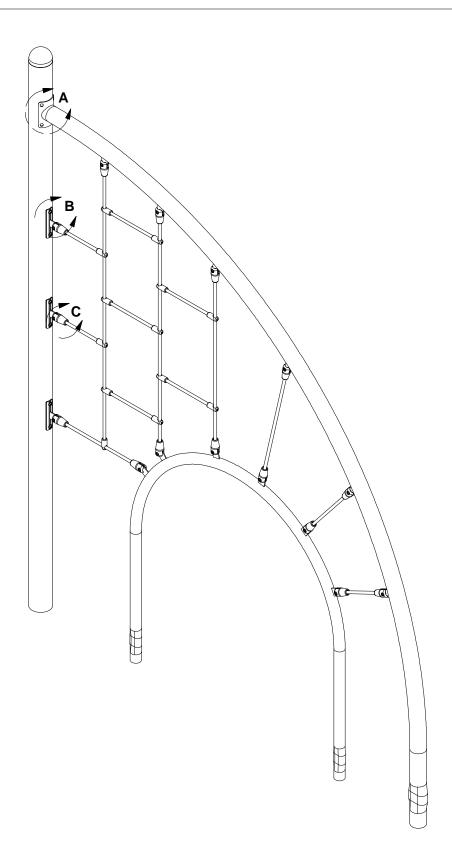
#### **INSTALLATION INSTRUCTIONS**

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.

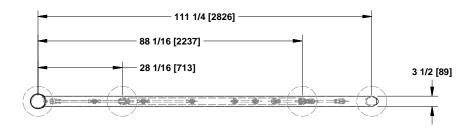
370-0854 VERTO CLIMBER 1 REV: 01 PCN: 17-0009 1/20/2017

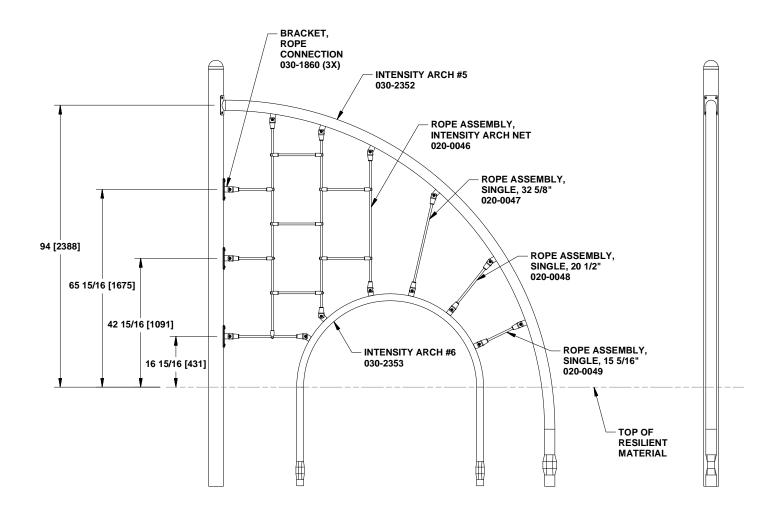




### 370-1583 APEX ROPE CLIMBER

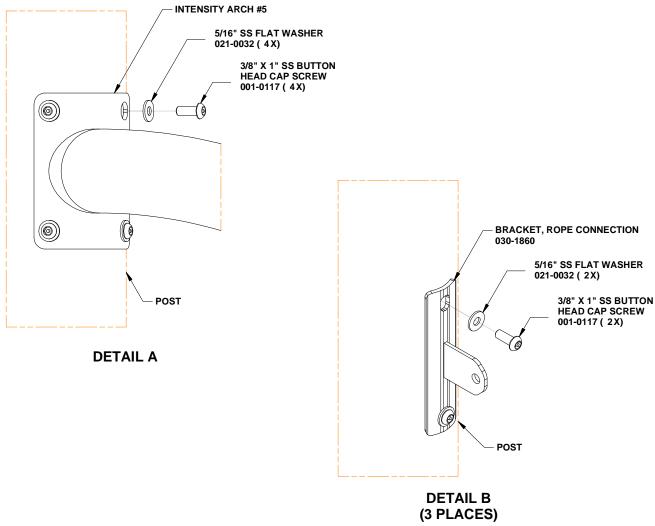


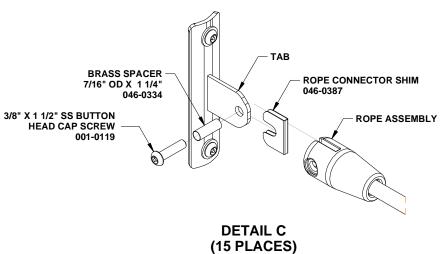




### 370-1583 APEX ROPE CLIMBER







### 370-1583 APEX ROPE CLIMBER

PART NO.	DESCRIPTION	QTY
020-0046	ROPE ASSEMBLY, INTENSITY ARCH NET	1
020-0047	ROPE ASSEMBLY, SINGLE, 32 5/8"	1
020-0048	ROPE ASSEMBLY, SINGLE, 20 1/2"	1
020-0049	ROPE ASSEMBLY, SINGLE, 15 5/16"	1
030-1860	BRACKET, ROPE CONNECTION	3
030-2352	INTENSITY ARCH #5	1
030-2353	INTENSITY ARCH #6	1
036-1411	HARDWARE PACKAGE	1
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	15

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

#### SPECIFICATIONS 3

ROPE ASSEMBLY, INTENSITY ARCH NET; ROPE ASSEMBLY, SINGLE, 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 consisting of 8 galvanized steel wires tightly covered with multifilament polypropylene fibers. Aluminum end connectors and ferrules with stainless steel screws.

BRACKET, ROPE CONNECTION: 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.

INTENSITY ARCH #5: One piece all welded construction consisting of formed 3 1/2" OD x 11 GA

galvanized steel tubing, formed 7 GA stainless steel sheet and 8 GA galvanized steel plates. Finished with a baked on powder coating.

INTENSITY ARCH #6: One piece all welded construction consisting of formed 2 3/8" OD x 10 GA galvanized steel tubing and 8 GA galvanized steel plates. 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: 150 LBS.

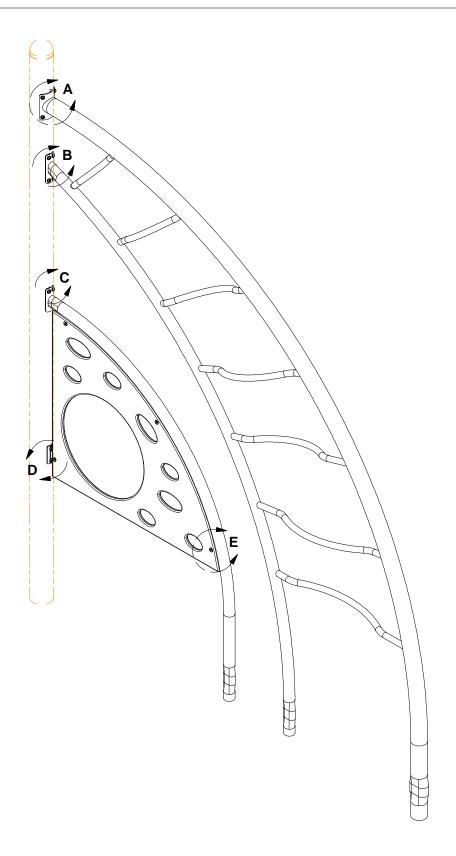
#### INSTALLATION INSTRUCTIONS

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.

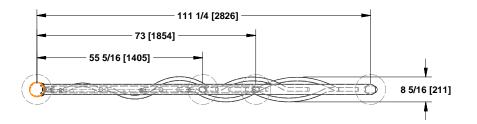
370-1583 APEX ROPE CLIMBER REV: 00 PCN: 14-0103 11/7/2014

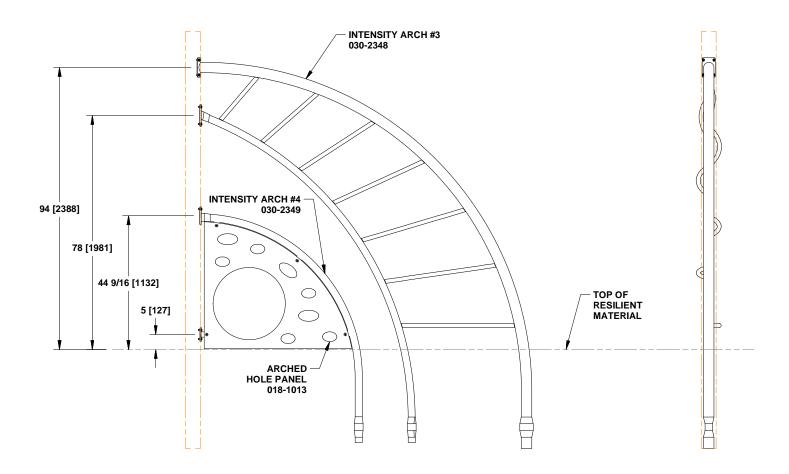




### 370-1584 APEX WAVE CLIMBER

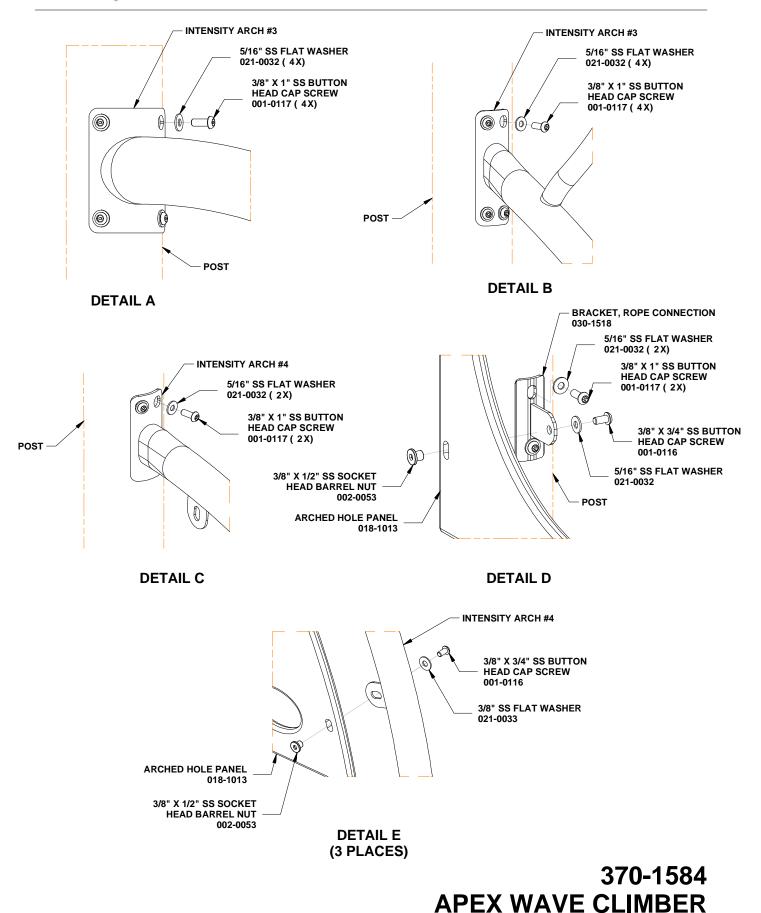






### 370-1584 APEX WAVE CLIMBER





PARISLISI		
PART NO.	DESCRIPTION	QTY
018-1013	ARCHED HOLE PANEL	1
030-1518	BRACKET, ROPE CONNECTION	1
030-2348	INTENSITY ARCH #3	1
030-2349	INTENSITY ARCH #4	1
036-1412	HARDWARE PACKAGE	1

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

#### **SPECIFICATIONS**

ARCHED HOLE PANEL: 3/4" extruded HDPE.

BRACKET, ROPE CONNECTION: 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.

INTENSITY ARCH #3: One piece all welded construction consisting of formed 3 1/2" x 11 GA & 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.

INTENSITY ARCH #4: 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.

HARDWARE PACKAGE: Stainless steel and zinc plated steel.

SHIPPING WEIGHT: 184 LBS.

#### **INSTALLATION INSTRUCTIONS**

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.

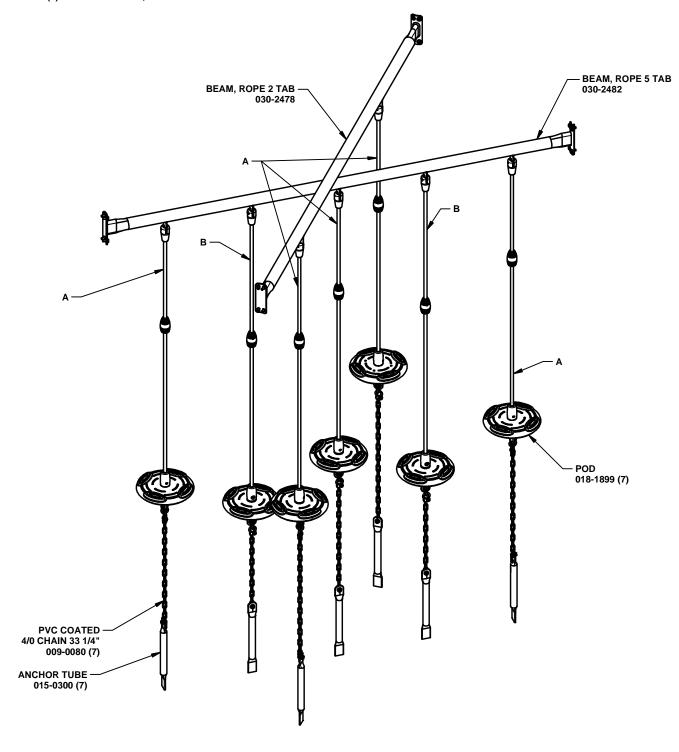
370-1584 APEX WAVE CLIMBER REV: 01 PCN: 14-0292 12/11/2014



#### **ISO VIEW**

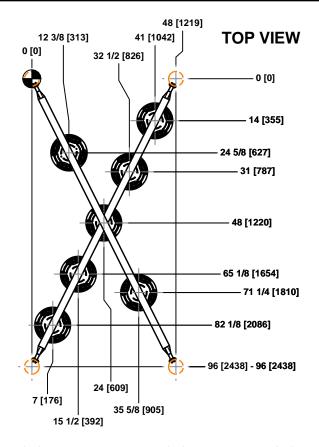
ROPE NOTES:

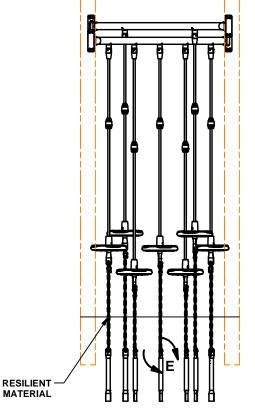
ROPE A - 020-0071 (5) ROPE ASSEMBLY, DISC TO TAB 64 1/8" ROPE B - 020-0084 (2) ROPE ASSEMBLY, DISC TO TAB 72 1/4"

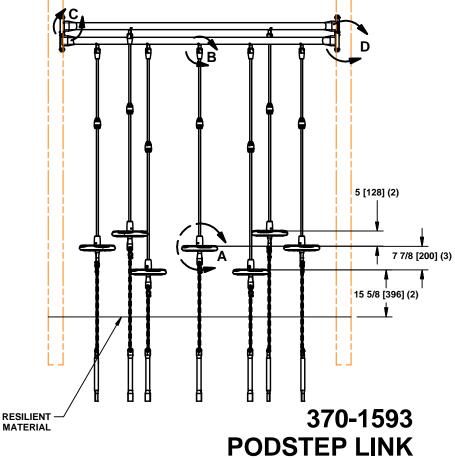


# **370-1593 PODSTEP LINK**

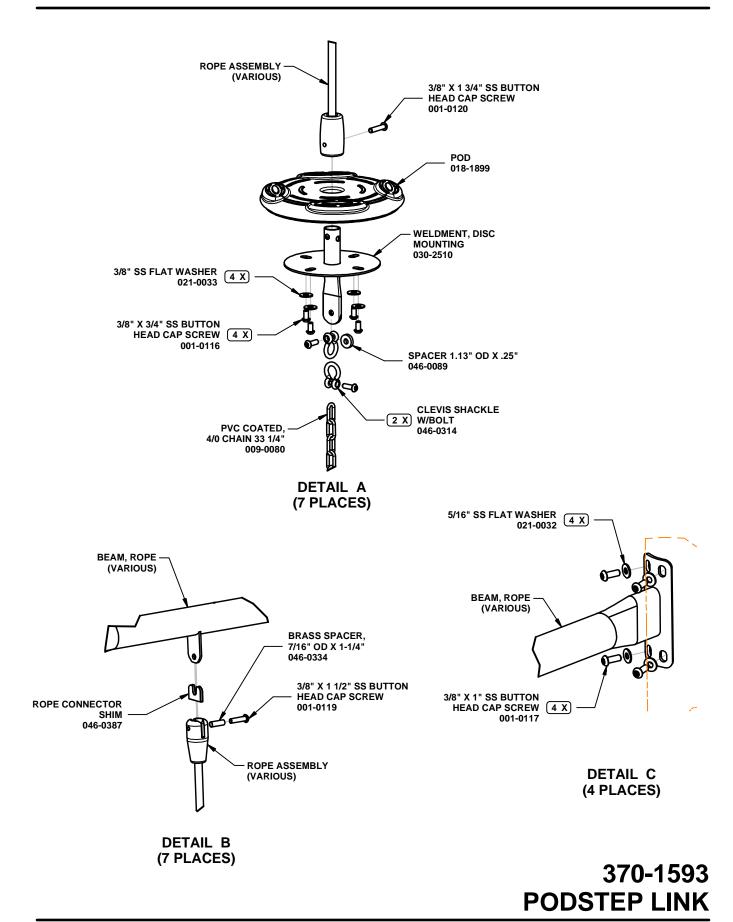




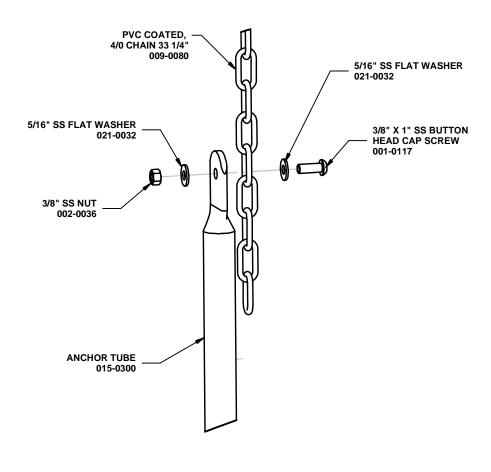












DETAIL D (7 PLACES)

## **370-1593 PODSTEP LINK**

PARTS LIST —				
PART NO.	DESCRIPTION	<u>QTY</u>		
009-0080	PVC COATED 4/0 CHAIN 33 1/4"	7		
015-0300	ANCHOR TUBE	7		
018-1899	POD	7		
020-0071	ROPE ASSEMBLY, DISC TO TAB 64 1/8"	5		
020-0084	ROPE ASSEMBLY, DISC TO TAB 72 1/4"	2		
030-2478	BEAM, ROPE 2 TAB	1		
030-2482	BEAM, ROPE 5 TAB	1		
030-2510	WELDMENT, DISC MOUNTING	7		
036-2010	HARDWARE PACKAGE	1		
046-0089	SPACER 1.13" OD X .25"	7		
046-0291	LOCTITE	1		
046-0314	CLEVIS SHACKLE W/BOLT	14		
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	7		

#### **SPECIFICATIONS**

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.

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.

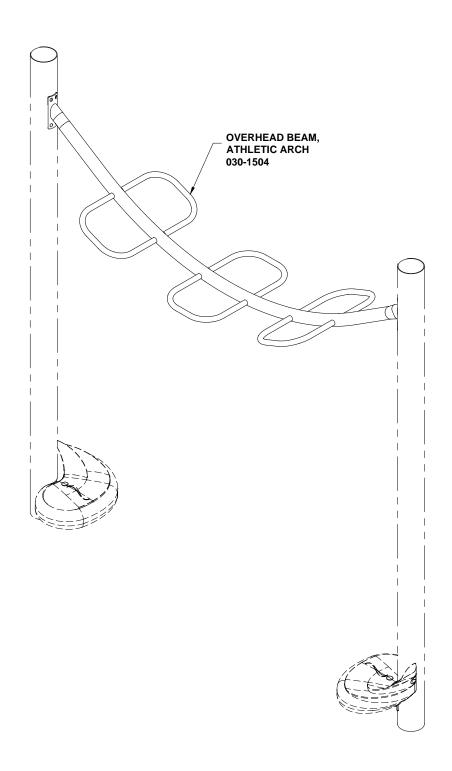
#### **INSTALLATION INSTRUCTIONS**

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.

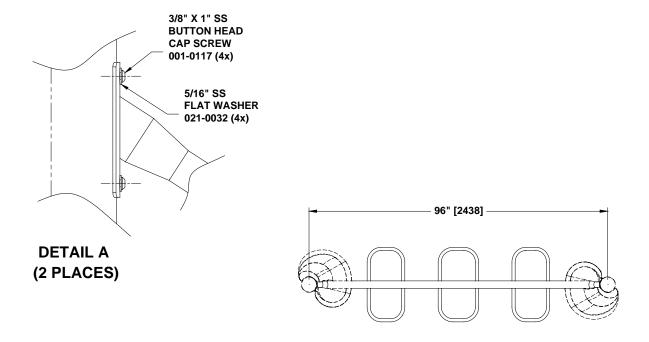
370-1593 PODSTEP LINK REV: 00 PCN: 15-0133 8/15/2016

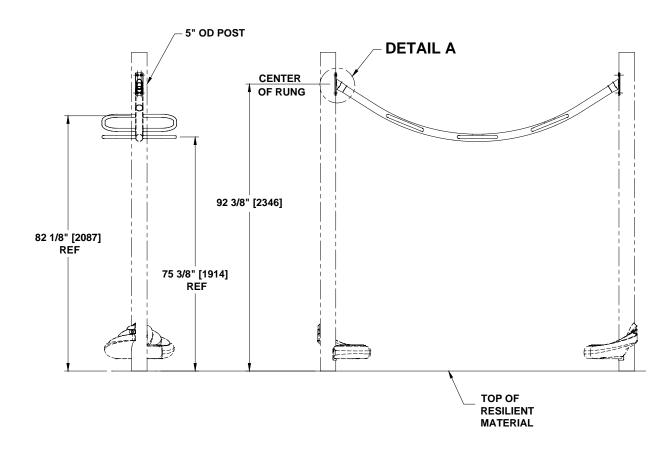




## 370-1610 ATHLETIC ARCH OH







### 370-1610 ATHLETIC ARCH OH

PART NO.	DESCRIPTION	QTY
030-1504	OVERHEAD BEAM, ATHLETIC ARCH	1
036-0258	HARDWARE PACKAGE	4

#### SPECIFICATIONS

OVERHEAD BEAM, ATHLETIC ARCH: One piece all welded construction consisting of 2 3/8" OD x 10 GA & 1.029" OD x 14 GA galvanized steel tubing, and 7 GA galvanized steel plate. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel.

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

**SHIPPING WEIGHT: 46 LBS.** 

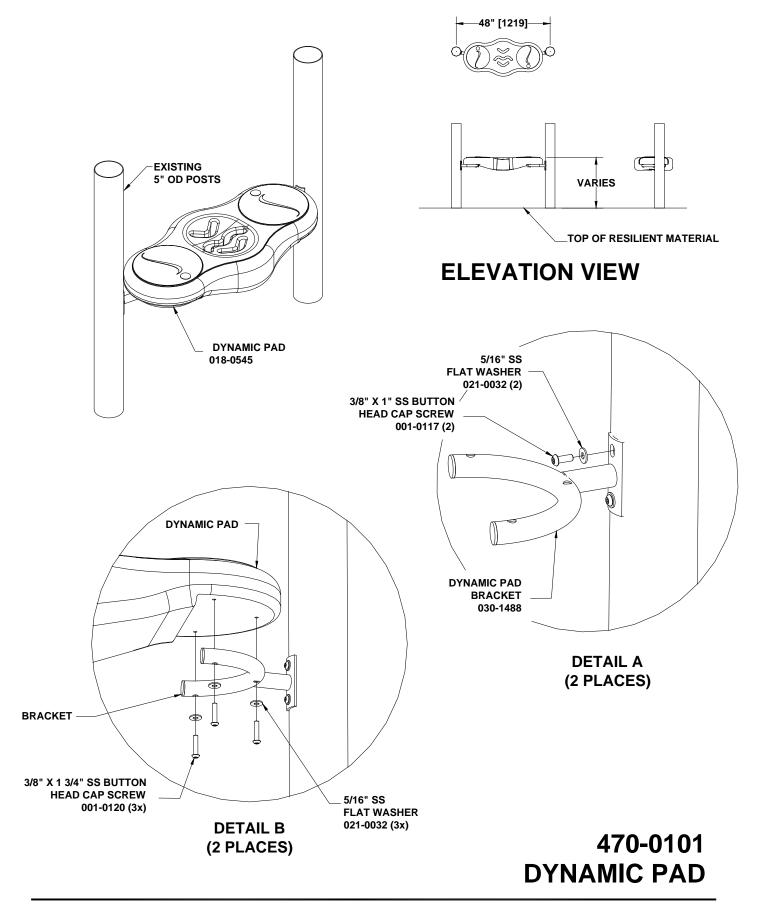
#### **INSTALLATION INSTRUCTIONS**

- 1. 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.	<b>DESCRIPTION</b>	<u>QTY</u>
018-0545	DYNAMIC PAD	1
030-1488	BRACKET, DYNAMIC PAD	2
036-1425	HARDWARE PACKAGE	1

PARTS LIST

#### SPECIFICATIONS

<u>DYNAMIC PAD</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.

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: Stainless steel

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

**SHIPPING WEIGHT: 27 LBS.** 

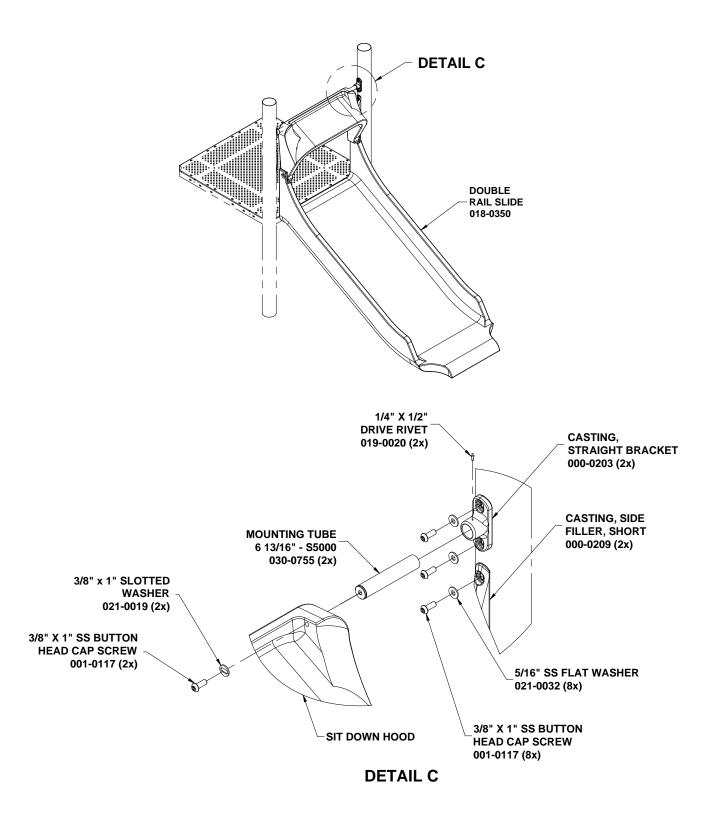
#### **INSTALLATION INSTRUCTIONS**

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.

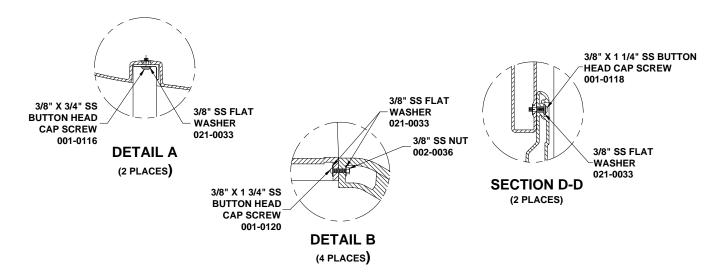
470-0101.doc Description: DYNAMIC PAD REV: 01 PCN: 15-0016 1/28/2015

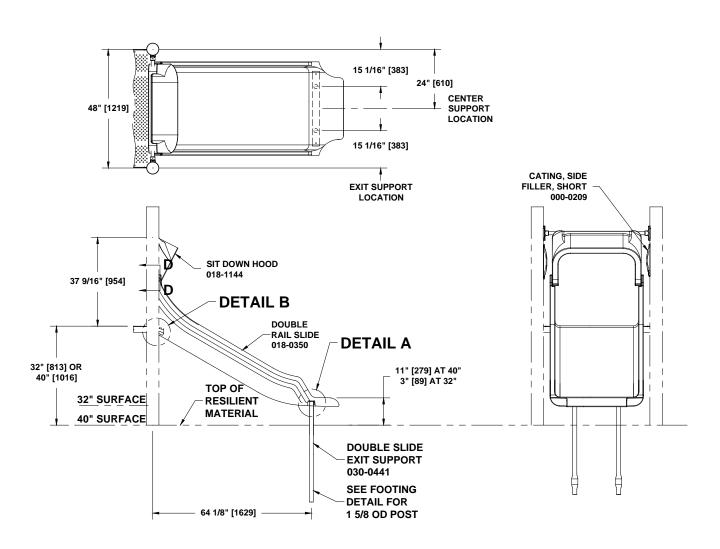




### 470-0435 DOUBLE RAIL SLIDE 32"-40"







470-0435 DOUBLE RAIL SLIDE 32"-40"

	PARTS LIST ———	
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>
000-0203	CASTING, STRAIGHT BRACKET	2
000-0209	CASTING, SIDE FILLER, SHORT	2
018-0350	DOUBLE RAIL SLIDE	1
018-1144	SIT DOWN HOOD	1
030-0441	DOUBLE SLIDE EXIT SUPPORT	1
030-0755	MOUNTING TUBE 6 13/16" - S5000	2
036-1374	HARDWARE PACKAGE	1

#### **SPECIFICATIONS**

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

<u>CASTING</u>, <u>SIDE FILLER</u>, <u>SHORT</u>: A56 Aluminum. Finished with baked on powder coating.

<u>DOUBLE RAIL SLIDE</u>: 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.

<u>DOUBLE SLIDE EXIT SUPPORT</u>: 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.

<u>HARDWARE PACKAGE</u>: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.

**SHIPPING WEIGHT: 127 LBS.** 

#### INSTALLATION INSTRUCTIONS

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

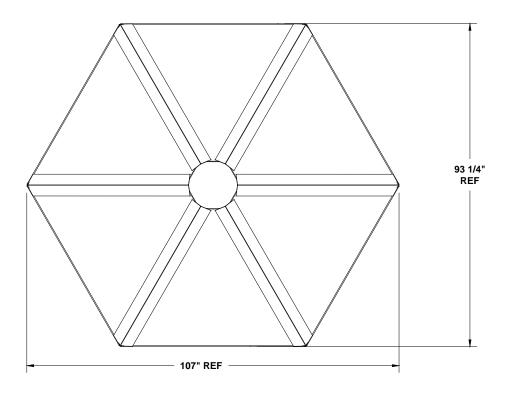
NOTE: Do not tighten hardware until instructed to do so.

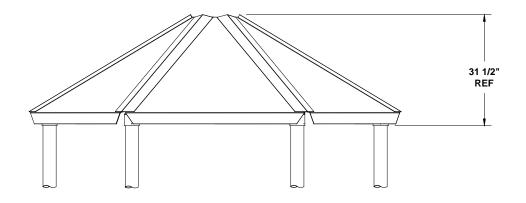
- 1. After platform has been installed, locate and dig footing hole as per dimensions shown. See footing detail drawing, which is located in the preface of your installation manual.
- 2. Attach DOUBLE SLIDE EXIT SUPPORT to slide using 3/8" x 3/4" button head cap screws and 3/8" washers. See DETAIL A. Tighten fasteners.
- 3. 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.
- 4. 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.
- 6. 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.
- 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.

470-0435.doc Description: DOUBLE RAIL SLIDE 32"-40"

REV: 01 PCN: 14-0046 3/17/2014

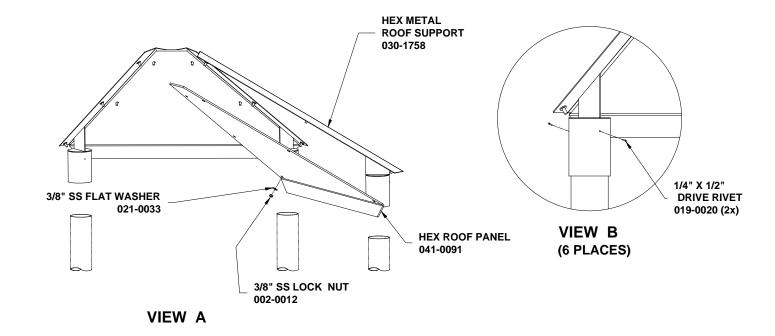


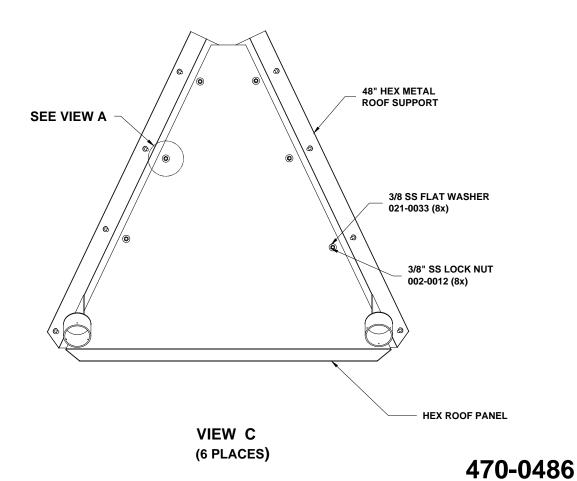




## 470-0486 HEX METAL ROOF







**HEX METAL ROOF** 

<u>DESCRIPTION</u>	<u>QTY</u>
48" HEX METAL ROOF SUPPORT	6
HARDWARE PACKAGE	1
HEX ROOF PANEL	6
	48" HEX METAL ROOF SUPPORT HARDWARE PACKAGE

PARTS LIST

#### **SPECIFICATIONS**

48" HEX METAL ROOF SUPPORT: 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.

<u>HARDWARE PACKAGE</u>: Stainless steel washers, zinc plated steel nuts and aluminum rivets with stainless steel pins.

<u>HEX ROOF PANEL</u>: 14 ga galv sheet steel, finished with a baked on powder coating.

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

**SHIPPING WEIGHT: 280 LBS.** 

#### **INSTALLATION INSTRUCTIONS**

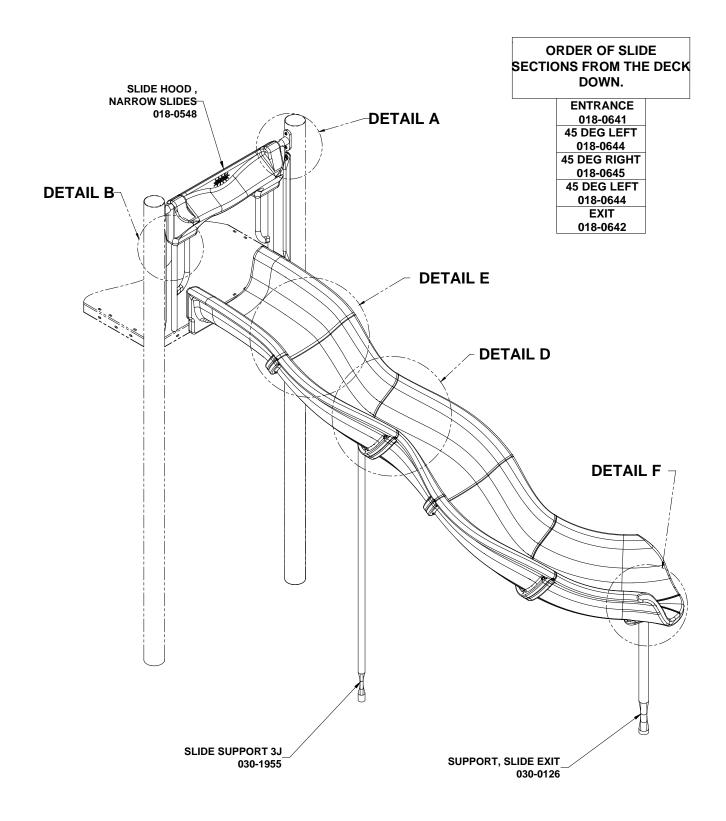
NOTE: Do not tighten hardware until instructed to do so.

- 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.

470-0486.doc Description: HEX METAL ROOF

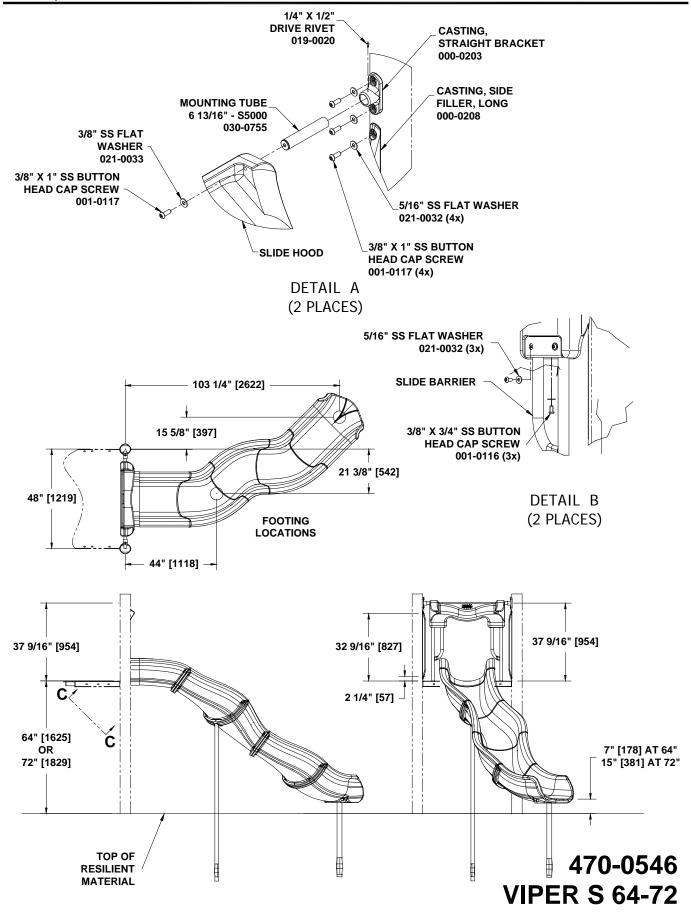
REV: 02 PCN: 14-0094 4/30/2014



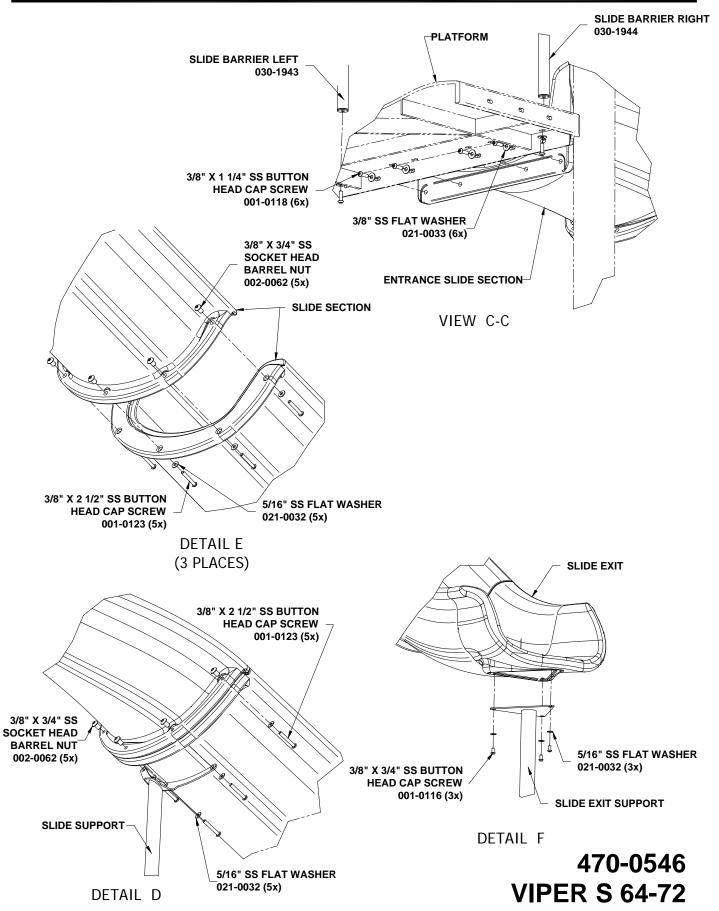


470-0546 VIPER S 64-72









PART NO.	PARTS LIST <u>DESCRIPTION</u>	<u>QTY</u>
000-0203	CASTING, STRAIGHT BRACKET	2
000-0208	CASTING, SIDE FILLER, LONG	2
018-0548	SLIDE HOOD , NARROW SLIDES	1
018-0641	ENTRANCE SLIDE SECTION	1
018-0642	EXIT SLIDE SECTION	1
018-0644	45 DEG LEFT SLIDE SECTION	2
018-0645	45 DEG RIGHT SLIDE SECTION	1
030-0126	SUPPORT, SLIDE EXIT	1
030-0755	MOUNTING TUBE 6 13/16" - S5000	2
030-1943	SLIDE BARRIER LEFT	1
030-1944	SLIDE BARRIER RIGHT	1
030-1955	SLIDE SUPPORT 3J	1
036-1143	HARDWARE PACKAGE	2
036-1148	HARDWARE PACKAGE	1

#### SPECIFICATIONS

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

<u>CASTING, SIDE FILLER, LONG</u>: A56 Aluminum. Finished with baked on powder coating.

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 textured surface.

45 DEG LEFT SLIDE SECTION; 45 DEG RIGHT SLIDE SECTION: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction, and a textured surface.

SUPPORT, SLIDE EXIT: One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and 8 GA galvanized sheet steel. Finished with a baked on powder coating.

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.

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.

<u>SLIDE SUPPORT 3J</u>: 8 gage formed plate welded to 1.660" OD tubing. Finished with baked on powder coat.

HARDWARE PACKAGE: Stainless steel

HARDWARE PACKAGE: Stainless steel hardware and aluminum rivets.

SHIPPING WEIGHT: 185 LBS.

#### INSTALLATION INSTRUCTIONS

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.

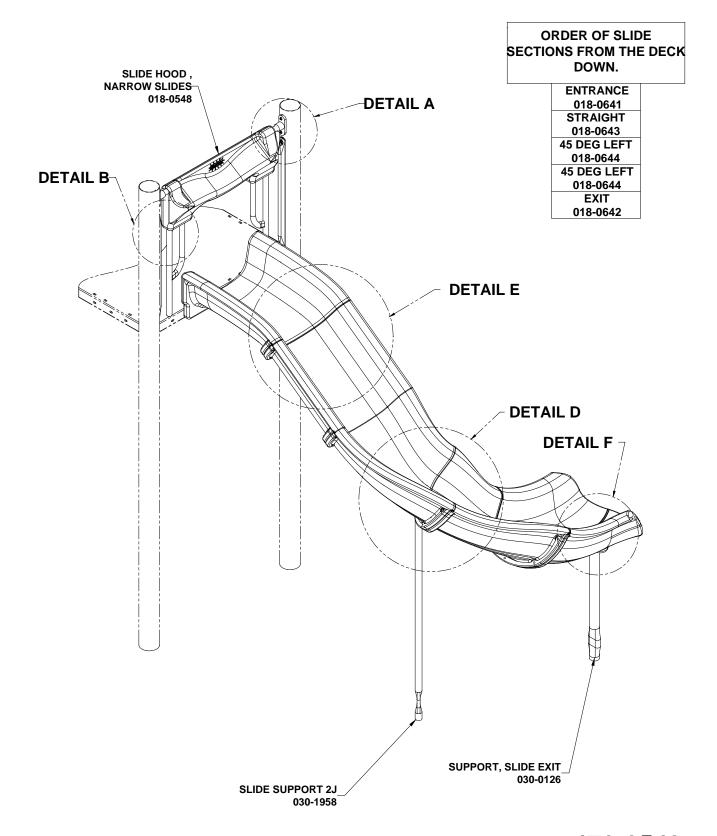
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

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.
- 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

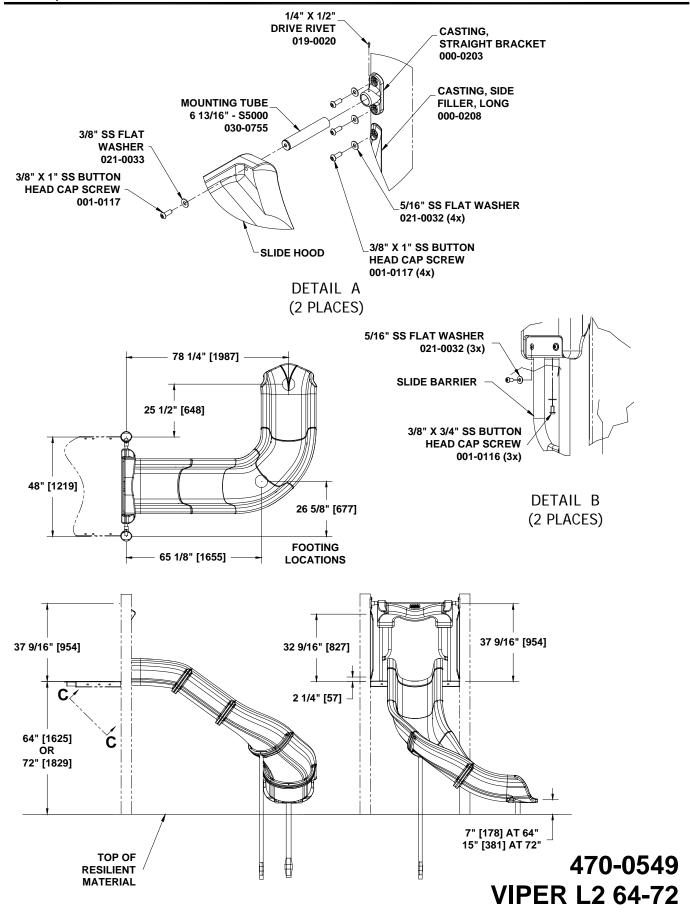
470-0546.doc Description: VIPER S 64-72 REV: 01 PCN: 13-0103 6/4/2013



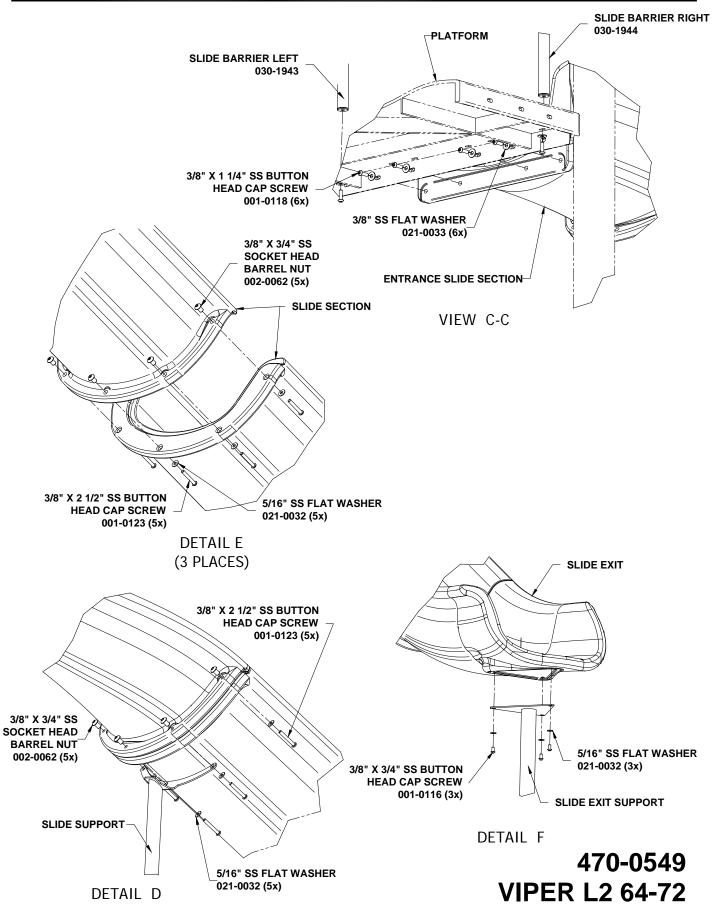


470-0549 VIPER L2 64-72









PART NO.	PARTS LIST <u>DESCRIPTION</u>	QTY
000-0203	CASTING, STRAIGHT BRACKET	2
000-0208	CASTING, SIDE FILLER, LONG	2
018-0548	SLIDE HOOD , NARROW SLIDES	1
018-0641	ENTRANCE SLIDE SECTION	1
018-0642	EXIT SLIDE SECTION	1
018-0643	STRAIGHT SLIDE SECTION	1
018-0644	45 DEG LEFT SLIDE SECTION	2
030-0126	SUPPORT, SLIDE EXIT	1
030-0755	MOUNTING TUBE 6 13/16" - S5000	2
030-1943	SLIDE BARRIER LEFT	1
030-1944	SLIDE BARRIER RIGHT	1
030-1958	SLIDE SUPPORT 2J	1
036-1143	HARDWARE PACKAGE	2
036-1148	HARDWARE PACKAGE	1

#### SPECIFICATIONS

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

<u>CASTING, SIDE FILLER, LONG</u>: A56 Aluminum. Finished with baked on powder coating.

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 textured surface.

STRAIGHT SLIDE SECTION; 45 DEG LEFT SLIDE SECTION: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction, and a textured surface.

 $\underline{\text{SUPPORT}}, \underline{\text{SLIDE EXIT}};$  One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and 8 GA galvanized sheet steel. Finished with a baked on powder coating.

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.

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.

<u>SLIDE SUPPORT 2J</u>: 8 gage formed plate welded to 1.660" OD tubing. Finished with baked on powder coat.

HARDWARE PACKAGE: Stainless steel

HARDWARE PACKAGE: Stainless steel hardware and aluminum rivets.

SHIPPING WEIGHT: 183 LBS.

#### INSTALLATION INSTRUCTIONS

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.

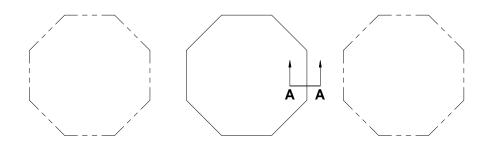
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

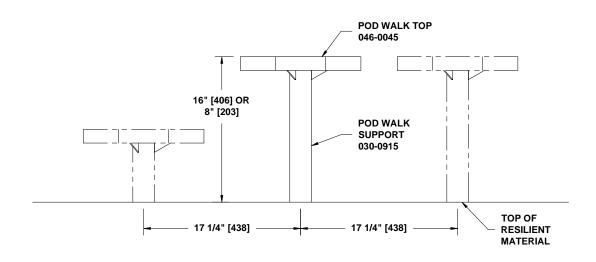
NOTE: Specific hardware used for assembly is shown in the Detail views.

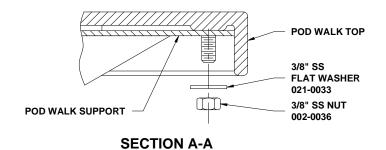
- 1. Install platform(s). See appropriate installation instructions located in your installation manual.
- 2. Dig footing holes for slide supports per dimensions shown. See typical concrete footing details which are located in the preface of your installation manual
- 3. Attach CAST SIDE FILLER, LONG 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.
- 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

470-0549.doc Description: VIPER L2 64-72 REV: 01 PCN: 13-0103 6/4/2013









## 560-0526 SINGLE POD WALK 8"-16"

PART NO.	DESCRIPTION	<u>QTY</u>
030-0915	POD WALK SUPPORT 40"	1
036-0596	HARDWARE PACKAGE	1
046-0045	POD WALK TOP	1

**PARTS LIST** 

#### **SPECIFICATIONS**

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.

HARDWARE PACKAGE: Stainless steel.

POD WALK TOP: Formed 1/8" sheet steel with studs welded into place. PVC coated after fabrication.

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

SHIPPING WEIGHT: 27 LBS.

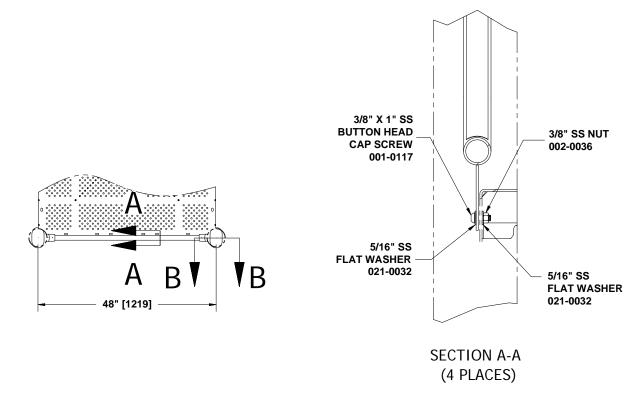
#### **INSTALLATION INSTRUCTIONS**

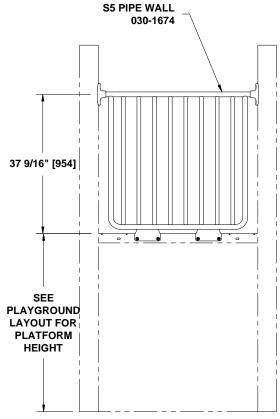
- Determine location of Pod Walk.
- 1. Dig footing holes per dimensions. See typical footing details, which are located in the preface of your installation manual.
- 2. Attach POD WALK SUPPORT to POD WALK TOP using 3/8 SS flat washers and 3/8 SS nuts. See SECTION A-A.
- 3. Tighten hardware
- 4. Insert 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.

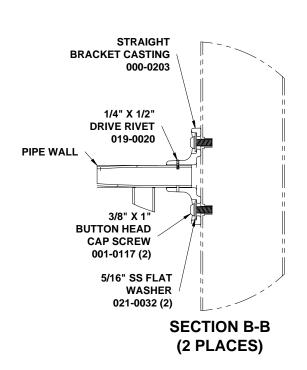
560-0526.doc Description: SINGLE POD WALK 8"-16"

REV: 00 PCN: 09-0104 5/12/2009









# **570-0394 PIPE WALL**

PARISLISI —				
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>		
000-0203	CASTING, STRAIGHT BRACKET	2		
030-1674	S5 PIPE WALL	1		
036-0258	HARDWARE PACKAGE	4		
036-0806	HARDWARE PACKAGE	1		
036-0819	HARDWARE PACKAGE	1		

#### SPECIFICATIONS

<u>CASTING, STRAIGHT BRACKET</u>: 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

HARDWARE PACKAGE: Aluminum Rivets

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

SHIPPING WEIGHT: 37 LBS.

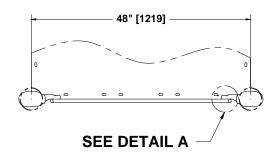
#### **INSTALLATION INSTRUCTIONS**

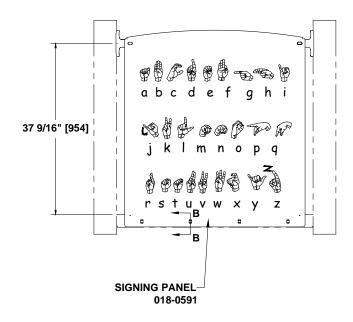
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

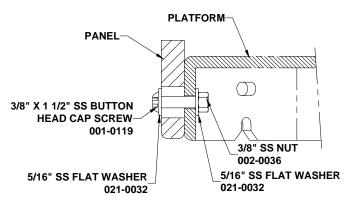
- 1. Slide BRACKETS onto tube on PIPE WALL.
- 2. Attach brackets with pipe wall to 5" OD post using 3/8" x 1" SS button head cap screws and 5/16" SS washers. See SECTION B-B.
- 3. Attach bottom of pipe wall to platform using 3/8" x 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. Tighten 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.
- Tighten All Hardware.

570-0394.doc Description: PIPE WALL REV: 00 PCN: 09-0021 8/14/2009

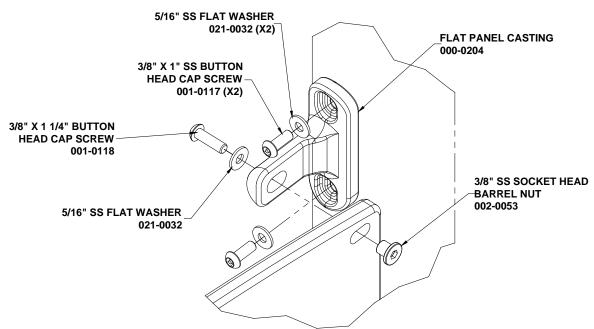








**SECTION B-B (4 PLACES)** 



**DETAIL A (2 PLACES)** 

570-0597 SIGNING PANEL

PART NO.	DESCRIPTION	QTY
000-0204	CASTING, FLAT PANEL	2
018-0591	SIGNING PANEL	1
036-1241	HARDWARE PACKAGE	1

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

SIGNING PANEL: 3/4" co-extruded HDPE.

**HARDWARE PACKAGE**: Stainless steel

SHIPPING WEIGHT: 46 LBS.

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

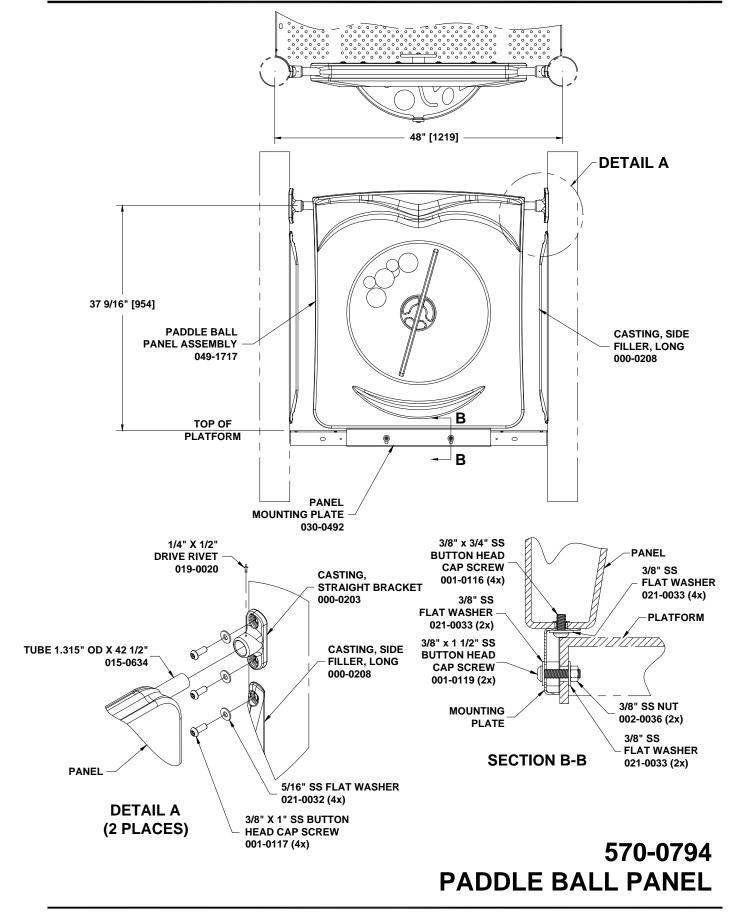
#### **INSTALLATION INSTRUCTIONS**

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 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.

570-0597.doc Description: SIGNING PANEL REV: 01 PCN: 14-0029 2/25/2014





PARTS LIST					
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>			
000-0203	CASTING, STRAIGHT BRACKET	2			
000-0208	CASTING, SIDE FILLER, LONG	2			
015-0634	TUBE 1.315" OD X 42 1/2"	1			
030-0492	PANEL MOUNTING PLATE	1			
036-1168	HARDWARE PACKAGE	1			
049-1717	PADDLE BALL PANEL ASSEMBLY	1			

#### SPECIFICATIONS

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

<u>CASTING</u>, <u>SIDE FILLER</u>, <u>LONG</u>: 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.

<u>HARDWARE PACKAGE</u>: 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.

SHIPPING WEIGHT: 47 LBS.

#### INSTALLATION INSTRUCTIONS

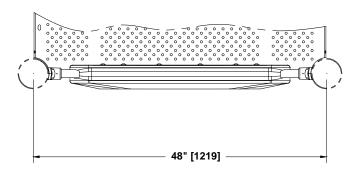
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

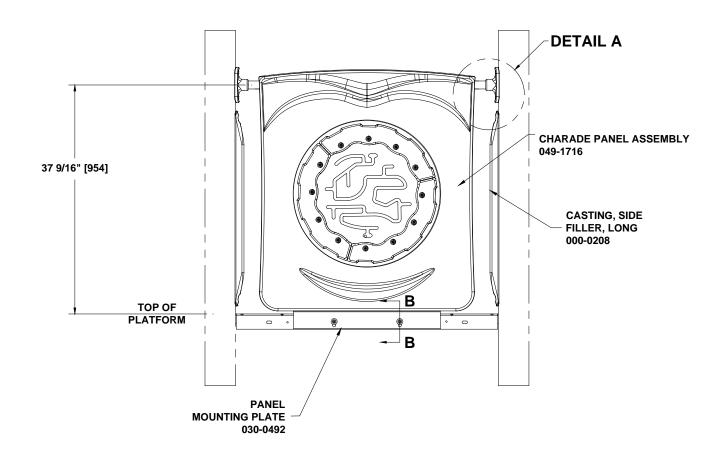
- 1. Attach PANEL MOUNTING PLATE to PADDLE BALL PANEL using 3/8" x 3/4" SS button head cap screws and 3/8"SS flat washers. See SECTION B-B.
- 2. Sleeve TUBE 1.315" OD X 42 1/2" into panel. See DETAIL A.
- 3. Position panel assembly on 5" OD posts and fasten upper hole of CASTING BRACKETS to 5" OD posts 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.
- 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.

570-0794.doc Description: PADDLE BALL PANEL

REV: 00 PCN: 13-0006 9/27/2013

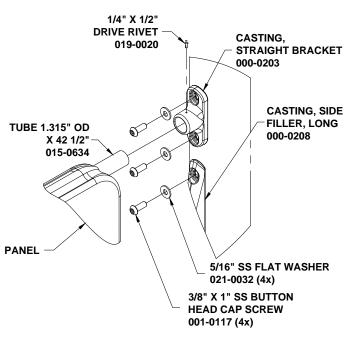




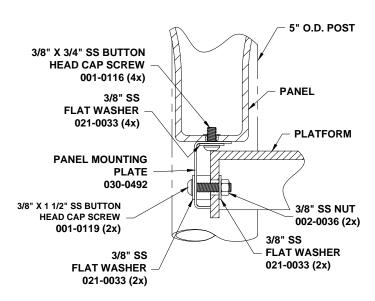


## 570-0797 CHARADE PANEL, ABOVE PLATFORM





DETAIL A (2 PLACES)



**SECTION B-B** 

## 570-0797 CHARADE PANEL, ABOVE PLATFORM

PARTS LIST					
PART NO.	<b>DESCRIPTION</b>	QTY			
000-0203	CASTING, STRAIGHT BRACKET	2			
000-0208	CASTING, SIDE FILLER, LONG	2			
015-0634	TUBE 1.315" OD X 42 1/2"	1			
030-0492	PANEL MOUNTING PLATE	1			
036-1168	HARDWARE PACKAGE	1			
049-1716	CHARADE PANEL ASSEMBLY	1			

#### **SPECIFICATIONS**

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

<u>CASTING</u>, <u>SIDE FILLER</u>, <u>LONG</u>: 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.

<u>HARDWARE PACKAGE</u>: 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.

SHIPPING WEIGHT: 62 LBS.

#### INSTALLATION INSTRUCTIONS

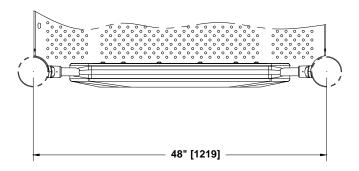
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

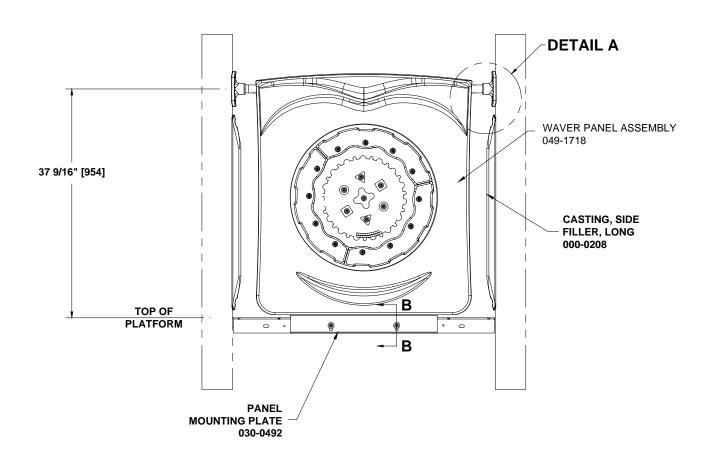
- 1. Attach PANEL MOUNTING PLATE to CHARADE PANEL using 3/8" x 3/4" SS button head cap screws and 3/8"SS flat washers. See SECTION B-B.
- 2. Attach SIDE FILLER CASTINGS to post using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 3. Sleeve TUBE 1.315" OD X 42 1/2" into panel. See DETAIL A.
- 4. 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.

570-0797.doc Description: CHARADE PANEL, ABOVE PLATFORM

REV: 00 PCN: 13-0006 9/27/2013

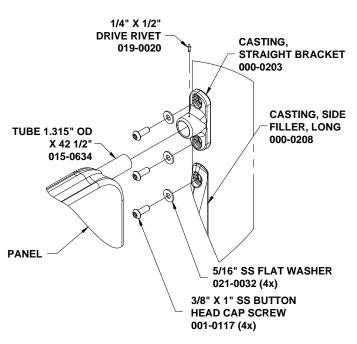




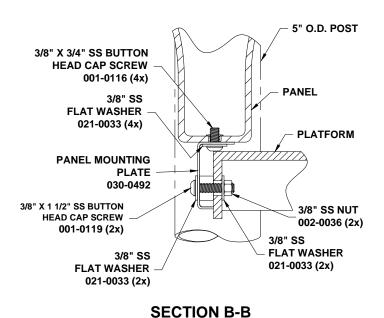


# 570-0798 WAVER PANEL, ABOVE PLATFORM





DETAIL A (2 PLACES)



570-0798 WAVER PANEL, ABOVE PLATFORM

PART NO.	PARTS LIST	QTY
000-0203	CASTING, STRAIGHT BRACKET	2
000-0208	CASTING, SIDE FILLER, LONG	2
015-0634	TUBE 1.315" OD X 42 1/2"	1
030-0492	PANEL MOUNTING PLATE	1
036-1168	HARDWARE PACKAGE	1
049-1718	WAVER PANEL ASSEMBLY	1

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

### **SPECIFICATIONS**

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

<u>CASTING</u>, <u>SIDE FILLER</u>, <u>LONG</u>: A56 Aluminum. Finished with baked on powder coating.

TUBE 1.315" OD X 42 1/2": 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.

SHIPPING WEIGHT: 62 LBS.

# INSTALLATION INSTRUCTIONS

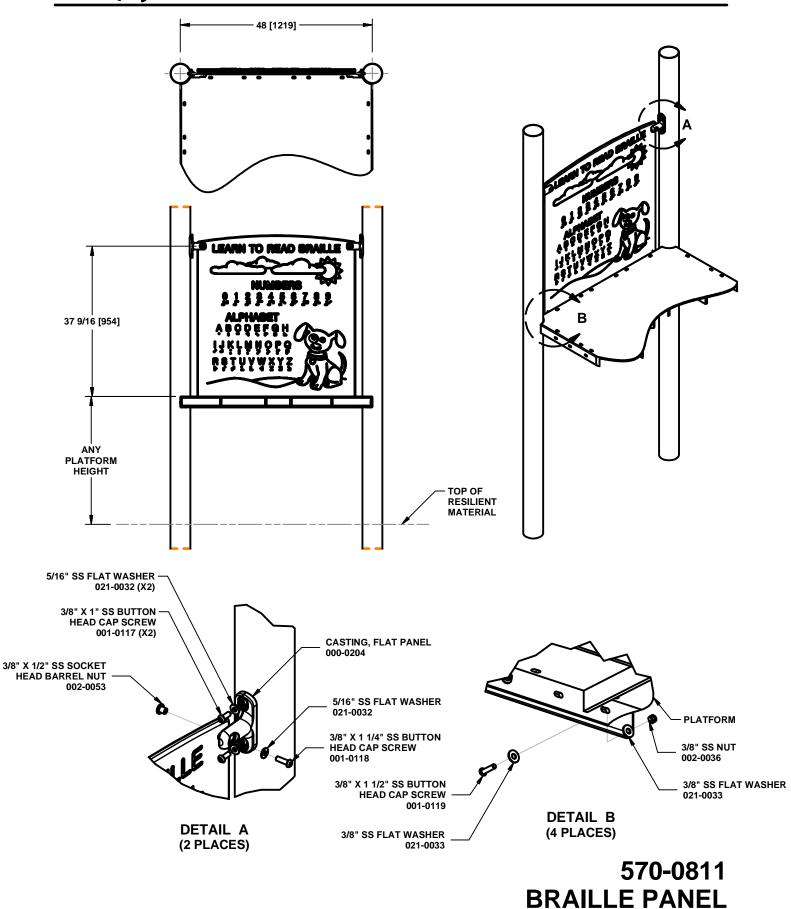
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 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.
- 2. 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.
- 4. 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.doc Description: WAVER PANEL, ABOVE PLATFORM

REV: 00 PCN: 13-006 9/27/2013





PART NO.	DESCRIPTION	<u>QTY</u>
000-0204	CASTING, FLAT PANEL	2
036-1241	HARDWARE PACKAGE	1
0/10-1727	BRAILLE PANEL ASSEMBLY	1

### SPECIFICATIONS =

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

HARDWARE PACKAGE: Stainless steel

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.

# **INSTALLATION INSTRUCTIONS**

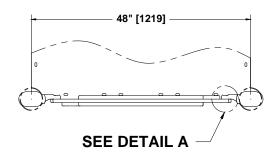
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

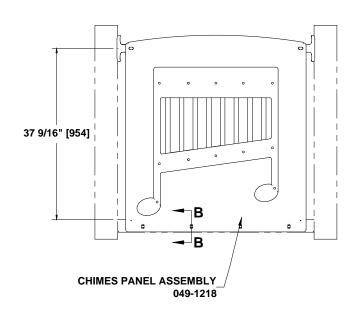
NOTE: Do not tighten hardware until instructed to do so.

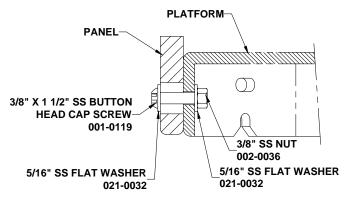
- 1. Determine location of BRAILLE PANEL assembly.
- 2. Attach CASTING, FLAT PANEL to posts using hardware specified in DETAIL A.
- 3. Attach BRAILLE PANEL ASSEMBLY to flat panel castings using hardware specified in DETAIL A.
- 4. Attach panel assembly to platform using hardware specified in DETAIL B.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

570-0811 BRAILLE PANEL REV: PCN: 14-0042 7/11/2014

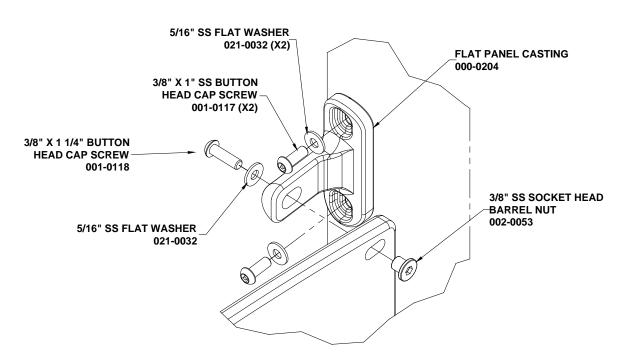








**SECTION B-B (4 PLACES)** 



**DETAIL A (2 PLACES)** 

570-1547 **CHIME PANEL, ABOVE PLATFORM** 

<b>DESCRIPTION</b>	<u>QTY</u>
CASTING, FLAT PANEL	2
HARDWARE PACKAGE	1
CHIMES PANEL ASSEMBLY	1
	CASTING, FLAT PANEL HARDWARE PACKAGE

PARTS LIST

### **SPECIFICATIONS**

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

HARDWARE PACKAGE: Stainless steel

<u>CHIMES PANEL ASSEMBLY</u>: 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: Hardware package(s) may include extra hardware that is not necessary for this installation.

SHIPPING WEIGHT: 60 LBS.

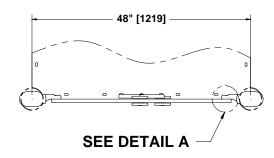
# **INSTALLATION INSTRUCTIONS**

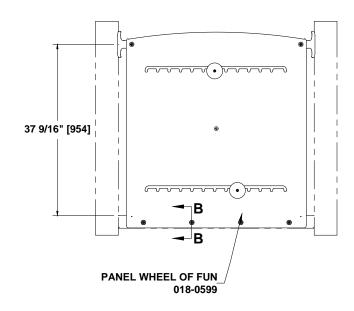
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

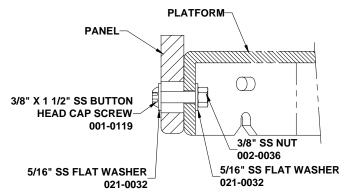
- 1. Attach FLAT PANEL CASTINGS to posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- 2. Attach CHIMES PANEL to the platform using 3/8" x 1 1/2" SS button head cap screws, 5/16" SS flat washers and 3/8" SS nuts. See SECTION B-B.
- 3. Insert 3/8" SS socket head 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.

570-1547.doc Description: CHIMES PANEL REV: 01 PCN: 14-0029 2/27/2014

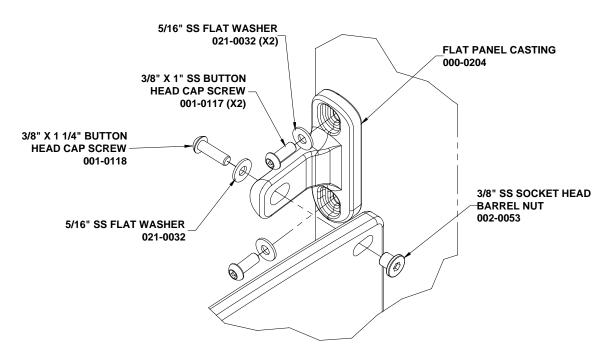








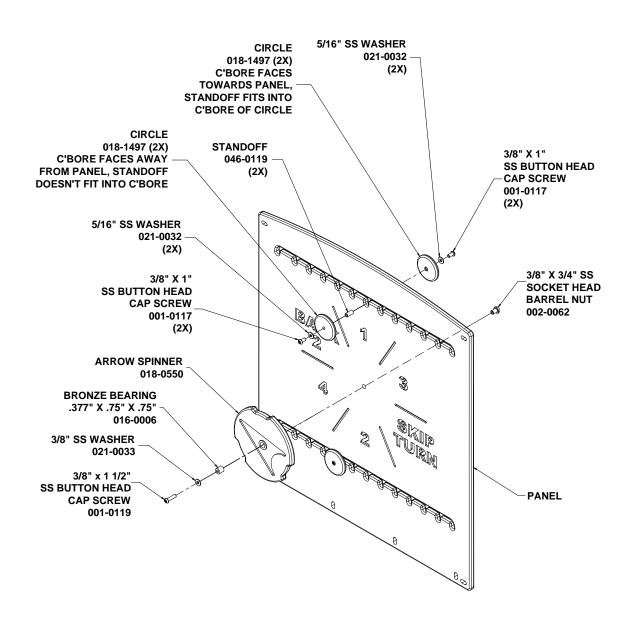
**SECTION B-B (4 PLACES)** 



570-1619
WHEEL OF FUN PANEL

**DETAIL A (2 PLACES)** 





**EXPLODED ASSEMBLY VIEW** 

# 570-1619 WHEEL OF FUN PANEL

PART NO.	PARTS LIST  DESCRIPTION	QTY
000-0204	CASTING, FLAT PANEL	2
016-0006	BRONZE BEARING .377" X .75" X	1
	.75"	
018-0550	ARROW SPINNER	1
018-0599	PANEL, WHEEL OF FUN	1
018-1497	CIRCLE	4
036-1261	HARDWARE PACKAGE	1
046-0119	STANDOFF	2

### **SPECIFICATIONS**

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

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

ARROW SPINNER; PANEL, WHEEL OF FUN: 3/4" co-extruded HDPE.

CIRCLE: 1/2" extruded HDPE

HARDWARE PACKAGE: Stainless steel

STANDOFF: 1/2" OD threaded stainless steel tubing.

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

SHIPPING WEIGHT: 51 LBS.

# **INSTALLATION INSTRUCTIONS**

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

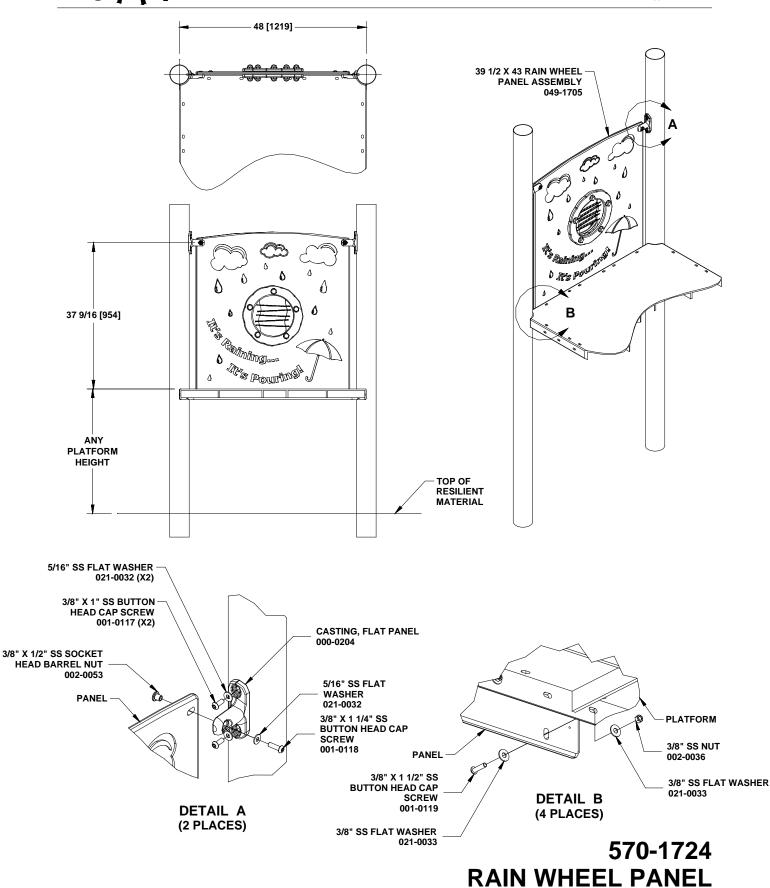
NOTE: Do not tighten hardware until instructed to do so.

- 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.

570-1619.doc Description: WHEEL OF FUN PANEL

REV: 02 PCN: 14-0029 2/27/2014





DESCRIPTION	QTY
CASTING, FLAT PANEL HARDWARE PACKAGE 39 1/2 X 43 RAIN WHEEL PANEL ASSEMBLY	2 1 1
	DESCRIPTION  CASTING, FLAT PANEL  HARDWARE PACKAGE  39 1/2 X 43 RAIN WHEEL PANEL

### **SPECIFICATIONS**

<u>CASTING, FLAT PANEL</u>: 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.

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

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.

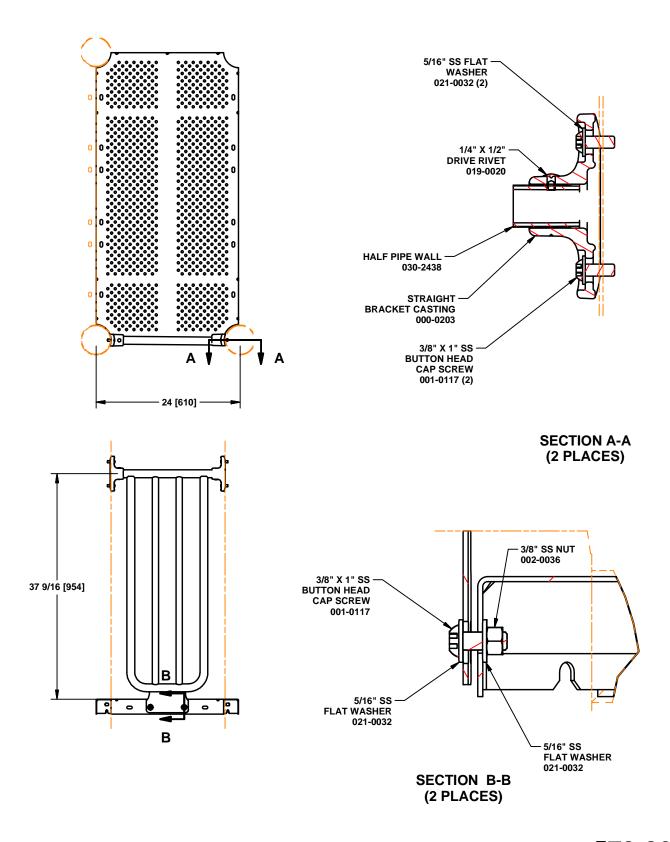
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- 1. Determine location of RAIN WHEEL PANEL assembly.
- 2. Attach CASTING, FLAT PANEL to posts using hardware specified in DETAIL A.
- 3. Attach 39 1/2 X 43 RAIN WHEEL PANEL ASSEMBLY to flat panel castings using hardware specified in DETAIL A.
- 4. 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

	PARISLISI -	
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>
000-0203	CASTING, STRAIGHT BRACKET	2
030-2438	HALF PIPE WALL	1
036-0258	HARDWARE PACKAGE	1
036-0819	HARDWARE PACKAGE	1
036-0870	HARDWARE PACKAGE	1

### SPECIFICATIONS

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

HALF 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: Aluminum Rivets

<u>HARDWARE PACKAGE</u>: Stainless steel screws, washers & nuts, nylon washers and zinc plated steel lock washer.

HARDWARE PACKAGE: Stainless steel.

<u>NOTE:</u> Hardware package(s) may include extra hardware that is not necessary for this installation.

**SHIPPING WEIGHT: 19.6 LBS.** 

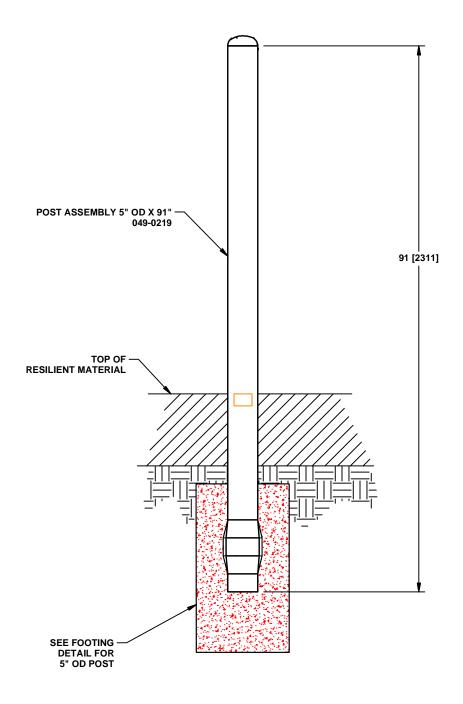
# **INSTALLATION INSTRUCTIONS**

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.

570-2624 HALF PIPE WALL REV: 01 PCN: 17-0009 1/17/2017





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

	PARTS LIST ———	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0219	POST ASSEMBLY 5" OD X 91"	1

**NOTE:** Hardware package(s) may include extra hardware

that is not necessary for this installation.

# SPECIFICATIONS =

POST ASSEMBLY 5" OD X 91": 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.

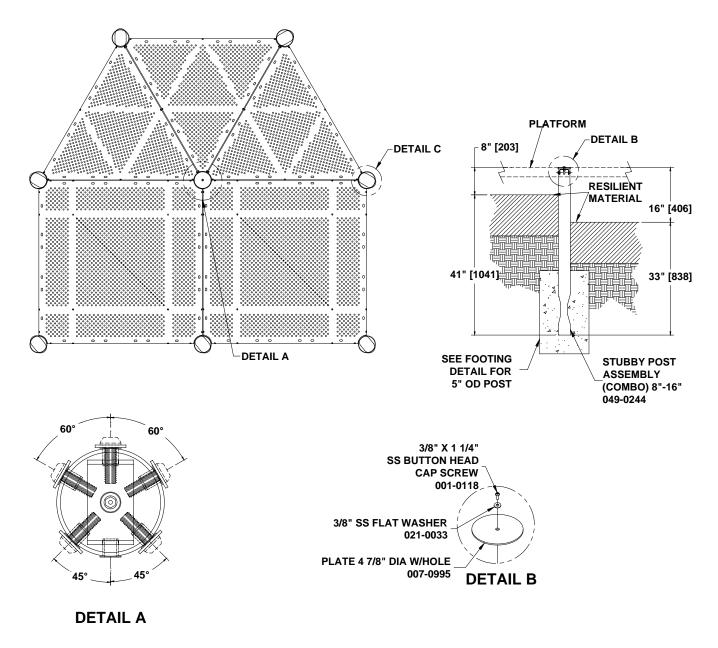
SHIPPING WEIGHT: 49 LBS.

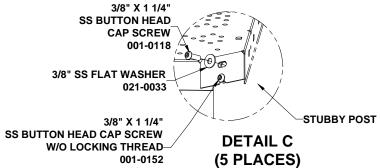
# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

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







# 670-0126 STUBBY POST (COMBO) 8"-16"

**NO WASHER** 

	IANIOLIOI	
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>
007-0995	PLATE 4 7/8" DIA W/HOLE	1
036-1198	HARDWARE PACKAGE	1
049-0244	STUBBY POST ASSEMBLY (COMBO) 8"-16"	1

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### **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.

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

SHIPPING WEIGHT: 26 LBS.

# **INSTALLATION INSTRUCTIONS**

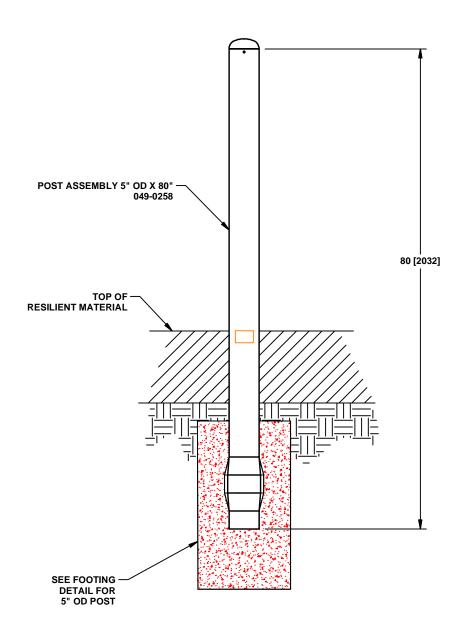
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 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.
- 5. 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





# 670-0150 POST ASSEMBLY 5" OD X 80"

	PARTS LIST ——	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0258	POST ASSEMBLY 5" OD X 80"	1

**NOTE:** Hardware package(s) may include extra hardware

that is not necessary for this installation.

SPECIFICATIONS —
EMBLY 5" OD X 80": Assembly consisting of 5" OD
remissed at a classic service and a contract of the contract o

POST ASSEMBLY 5" OD X 80": 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.

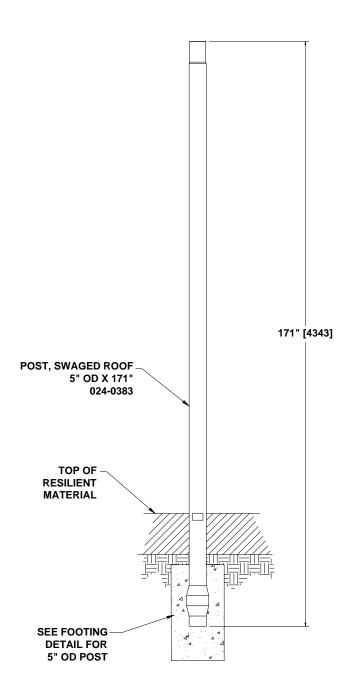
SHIPPING WEIGHT: 43 LBS.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

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"

# PARTS LIST PART NO. DESCRIPTION QTY 024-0383 POST, SWAGED ROOF 5"OD X 1 11GA X 171" Note: Hardware package(s) may include extra hardware that is not necessary for this installation.

### SPECIFICATIONS

POST, SWAGED ROOF 5"OD X 11GA X 171": 5" OD x 11 GA galvanized steel tubing finished with a baked on powder coating.

SHIPPING WEIGHT: 90 LBS.

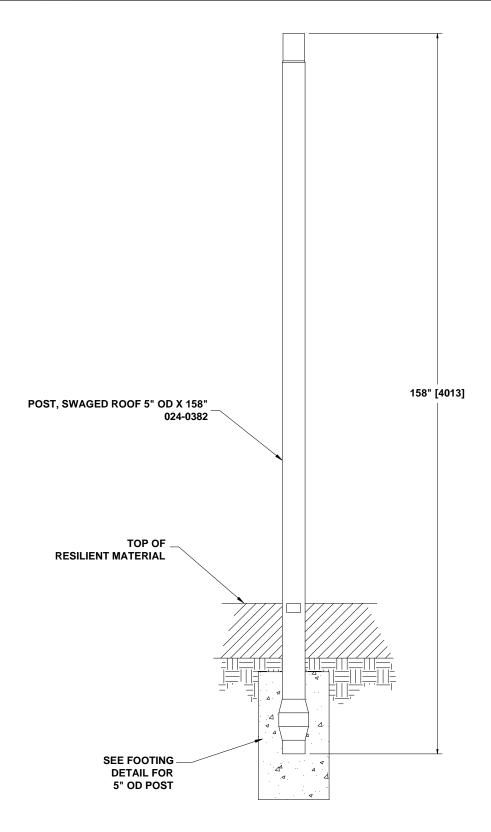
# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5" OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

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"

# PARTS LIST PART NO. DESCRIPTION QTY 024-0382 POST, SWAGED ROOF 5"OD X 1 11GA X 158" Note: Hardware package(s) may include extra hardware that is not necessary for this installation.

### SPECIFICATIONS

POST, SWAGED ROOF 5"OD X 11GA X 158": 5" OD x 11 GA galvanized steel tubing finished with a baked on powder coating.

SHIPPING WEIGHT: 83 LBS.

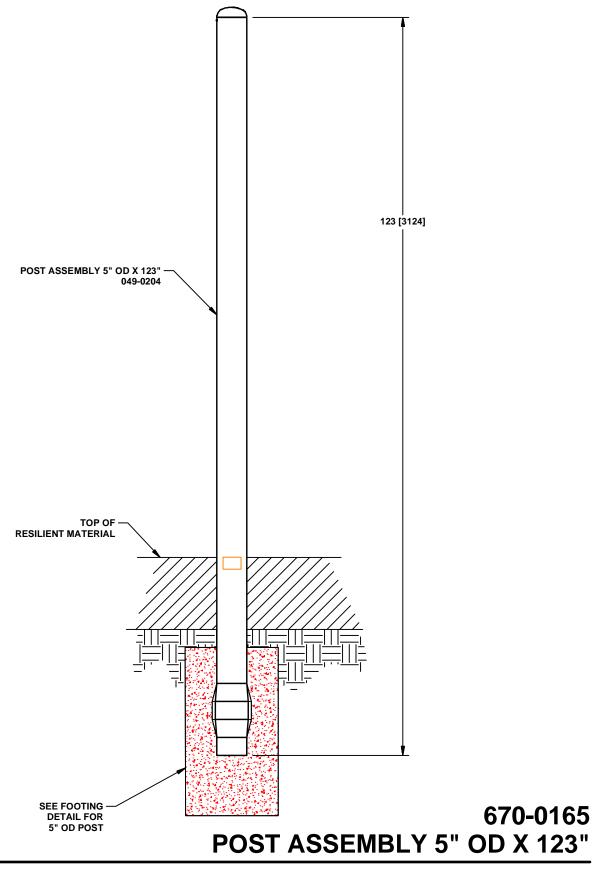
# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5" OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

670-0164.doc Description: POST, SWAGED ROOF 5" OD X 158"

REV: 01 PCN: 10-0339 10/22/2010





	PARISLISI	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0204	POST ASSEMBLY 5" OD X 123"	1

**NOTE:** Hardware package(s) may include extra hardware

that is not necessary for this installation.

# SPECIFICATIONS =

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.

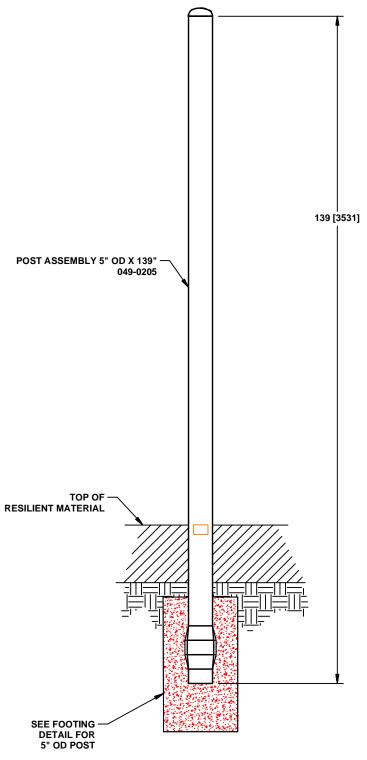
SHIPPING WEIGHT: 66 LBS.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

670-0165 POST ASSEMBLY 5" OD X 123" REV: 02 PCN: 16-0257 12/5/2016





670-0166 POST ASSEMBLY 5" OD X 139"

	PARTS LIST ——	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0205	POST ASSEMBLY 5" OD X 139"	1

**NOTE:** Hardware package(s) may include extra hardware

that is not necessary for this installation.

SPECIFICATIONS —
EMBLY 5" OD X 139": Assembly consisting of 5" OD
remised at all tubing 4/4" well aget alwaying age

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.

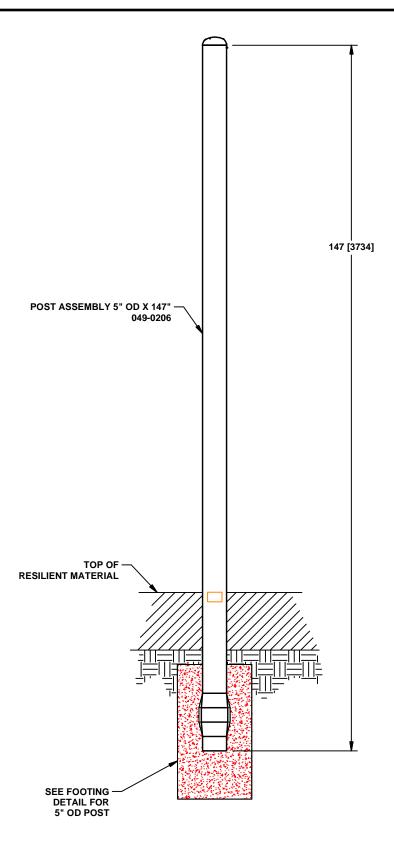
SHIPPING WEIGHT: 74 LBS.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

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 ———	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0206	POST ASSEMBLY 5" OD X 147"	1

### **SPECIFICATIONS**

POST ASSEMBLY 5" OD X 147": 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.

SHIPPING WEIGHT: 78 LBS.

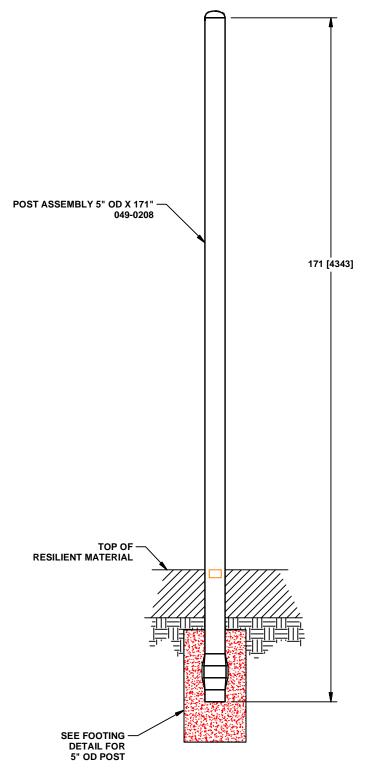
**NOTE:** Hardware package(s) may include extra hardware that is not necessary for this installation.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

670-0167 POST ASSEMBLY 5" OD X 147" REV: 02 PCN: 16-0257 12/5/2016





670-0169 POST ASSEMBLY 5" OD X 171"

	PARISLISI -	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0208	POST ASSEMBLY 5" OD X 171"	1

**NOTE:** Hardware package(s) may include extra hardware

that is not necessary for this installation.

0. 20 1071110110
MBLY 5" OD X 171": Assembly consisting of 5" OD
anima di ata al trabina a 4/40 con la cast alconsidero anno

POST ASSE 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.

SPECIFICATIONS

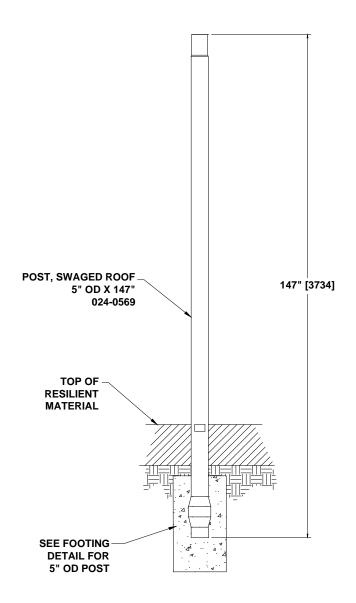
SHIPPING WEIGHT: 91 LBS.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

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"

# **PARTS LIST** PART NO. **DESCRIPTION QTY** 024-0569 POST, SWAGED ROOF 5"OD X 11GA X 147" coating. Note: Hardware package(s) may include extra hardware that is not necessary for this installation.

# SPECIFICATIONS

POST, SWAGED ROOF 5"OD X 11GA X 147": 5" OD x 11 GA galvanized steel tubing finished with a baked on powder

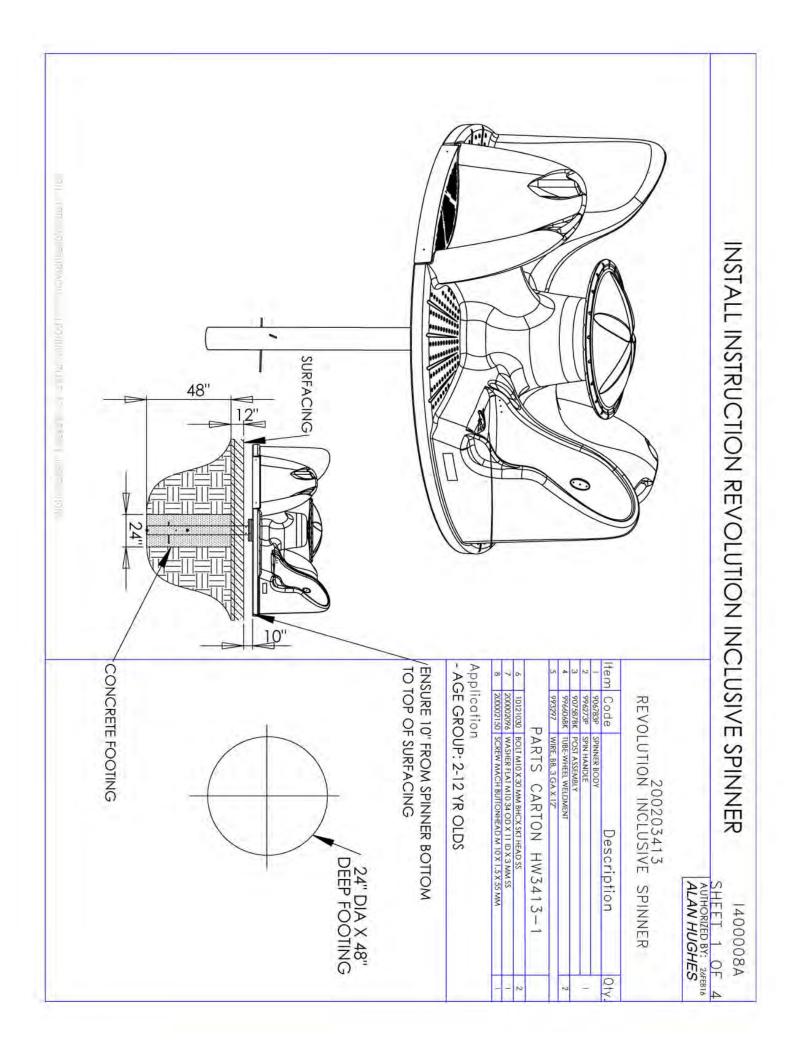
SHIPPING WEIGHT: 78 LBS.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5" OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and **CPSC** guidelines.

670-0172.doc Description: POST, SWAGED ROOF 5" OD X 147"

REV: 00 PCN: 14-0025 7/21/2014



# INSTALL INSTRUCTION REVOLUTION INCLUSIVE SPINNER

1400008A

SHEET 2 OF 2
AUTHORIZED BY: 26FEB
ALAN HUGHES

# BEFORE STARTING INSTALLATION OF YOUR LITTLE TIKESCOMMERCIAL PRODUCT PLEASE READ INSTRUCTIONS THOROUGHLY

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.

The site must be checked for adverse or unusual conditions, i.e.

- ) Exposed, cracked or loose concrete footings.
- Worn, scattered or compressed surface material.
- Exposed roots, rocks or other environmental obstacles that form potential trip hazards.
- Broken glass, refuse, or foreign objects around and on play equipment.
- ) Poor drainage areas.
- before digging. All sites especially those close to existing buildings must be checked for electrical or gas lines and drainage

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 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," maintenance will result in premature wear, reduced life expectancy and possible failure. As the owner, it is most important that you are aware of your responsibility for the safe use of your new

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 guidelines and/or standards. work. Installation must be done to the manufacturer's assembly manual and applicable satety trimmed and peened smooth by the installer. Once your installation is complete, always inspect your All Little Tikes Commercial Play Systems playevents have been designed and engineered to meet all

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

ALL CHILDREN SHOULD BE SUPERVISED WHILE PLAYING ON EQUIPMENT.

# INSTALL INSTRUCTION REVOLUTION INCLUSIVE SPINNER

STEP BB WIRE (2) REQ'D Assembly line up with holes in bottom of Spinner. installation.

1. Dig one footing, 24" dia. x 48" deep. DIG FOOTING AND SET POST ASSEMBLY

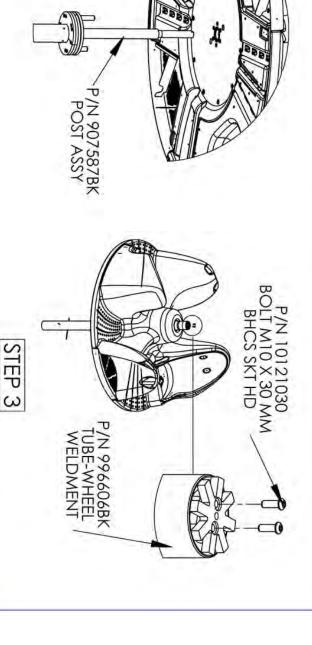
140008A

ALAN HUGHES SHEFT 3 OF 4

equal amounts of wire protrude on both sides. Ensure Post concrete and allow to cure for 72 hours prior to completing Assembly is braced into footing level and plumb. Pour Insert BB wire into pre-drilled holes in Post Assembly. Ensure

2. Set Spinner onto Post Assembly. Ensure pins on Post INSERT POST ASSEMBLY INTO SPINNER

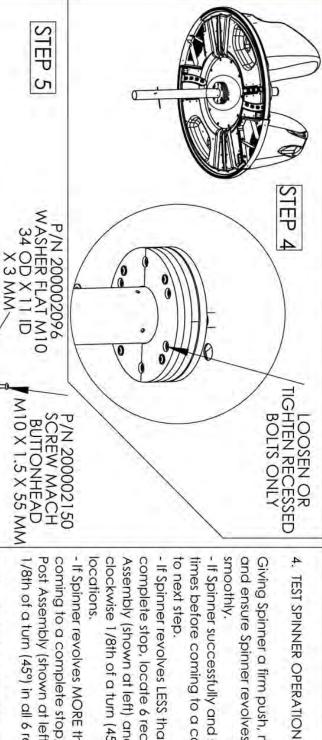
fasten via hardware shown. Assembly and line up two outer bolts holes on top of Post Locate Tube-Wheel Weldment. Set Tube atop Post ATTACH TUBE-WHEEL WELDMENT TO POST ASSEMBLY Assembly with two outer bolt holes on Tube's top. Securely



STEP 2

# INSTALL INSTRUCTION REVOLUTION INCLUSIVE SPINNER

ALAN HUGHES 140008A 4 OF



and ensure Spinner revolves freely, quietly and Giving Spinner a firm push, note number of revolutions

- If Spinner successfully and smoothly revolves 1 to 1 1/4 to next step. times before coming to a complete stop, move ahead
- If Spinner revolves LESS than 1 time before coming to a clockwise 1/8th of a turn (45°) in all 6 recessed bolt complete stop, locate 6 recessed bolts on Post locations. Assembly (shown at left) and LOOSEN counter
- 1/8th of a turn (45°) in all 6 recessed bolt locations. - If Spinner revolves MORE than 1 1/4 times before Post Assembly (shown at left) and TIGHTEN clockwise coming to a complete stop, locate 6 recessed bolts on

smooth operation. Retry spinning and continue to adjust as needed for

after installation depending upon usage NOTE: This test needs to be repeated every 3-6 months

# 5. ATTACH WHEEL-SPIN

set into recessed 'star' indentations on Wheel-Spin's Set Wheel-Spin atop Tube, ensuring 'star' arms on Tube on Tube correctly to create a cog-wheel effect. Fasten via underneath side. It is IMPORTANT that these line up hardware shown. Bolt will fasten into center bolt hole

labels onto Post Assembly where they can be easily protective surfacing. Apply Little Tikes and warning turns freely. If not, please refer back to Step 4. Install all Ensure all hardware is tightened. Turn Spinner, ensuring it

WHEEL-SPIN

RECESS UNDERNEATH TUBE WITH 'STAR' LINE UP 'STAR' ON

Rev. A



# **Product Specifications**

Bug Bites® "C" Spring Rider - Buzzy

961



**CONCRETE:** 

0.25 cu. yds.



MODEL #:PRODUCT:GRND SPACE961Buzzy "C" Spring Rider3'-7" x 5'-0"

# **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 bumble-bee.

Rider Body: The rider body shall consist of a Rockite 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  $\underline{\text{1-1/2" tube}}$  and/or of 2" x 2" x 1/4" angle, a cross member constructed of  $\underline{\text{1-1/4" pipe}}$ , handholds of 1" (1" O.D.) 15 ga. tube and/or  $\underline{\text{Gator Grip}}$ , a cross brace of  $\underline{\text{3/4" x 1" oval tube}}$  and  $\underline{\text{Gator Grip}}$ , 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 welded.

"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 5" tube, all solid welded.

Fasteners: All hardware shall be <u>Fastener style A</u>.

Finish: The Rockite 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 Mira-Cote™.

Consult the Glossary of Technical Data for Materials, Processes and Finishes of the underlined items.



Final Assembly

Miscellaneous Freestanding Play Equipment and Non-Play Equipment

# STEP 1

Plumb and level assemblies.

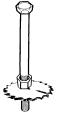
# STEP 2

Tighten all fasteners.



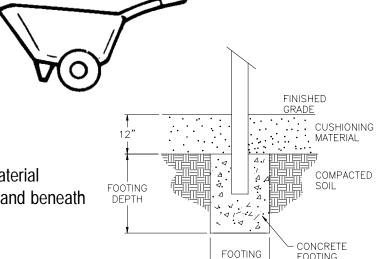
# STEP 3

Trim all bolts. No more than two (2) threads may protrude after trimming by installer. Peen ends smooth to touch.



# STEP 4

Pour concrete in remaining Footings, and allow 72 hours to cure.



DIA

# STEP 5

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.* 

# **FINAL STEP**

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





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)

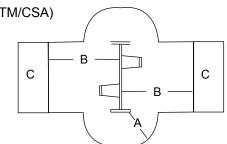
- For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. 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.

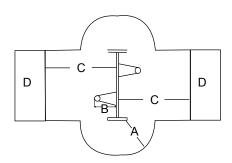
Infant Seat Swing Zones

**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)



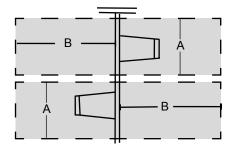
# (EN)

• 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 x Distance from pivot point to seat) + <u>either</u> 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.

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FCN2147

• The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. 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.

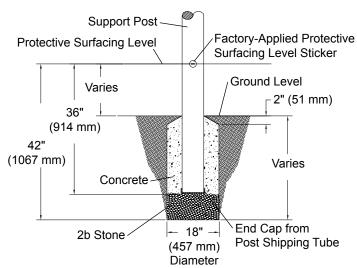
### **Maintenance**

• 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.

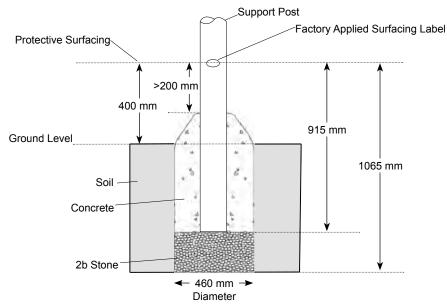
# **Supervision Guidelines**

- 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.





Support Post Footing Detail (ASTM/CSA)



# **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.



Footing Detail Support Post (EN)



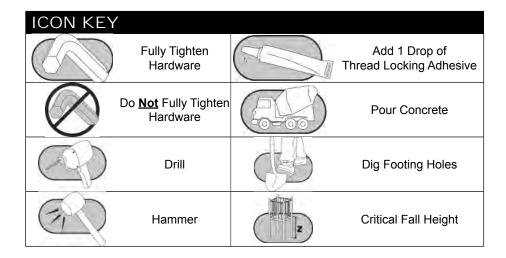


Assembly View (representative model)

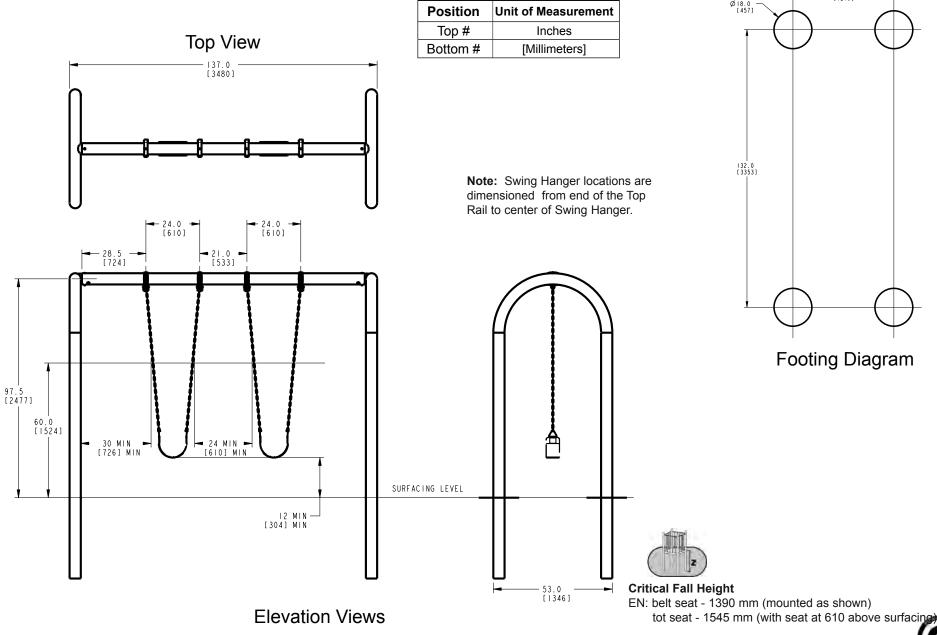
# Installation Instructions Playworld Systems® Model XX0287 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing 8 ft. (2438 mm) Top Rail

Installation Preparation

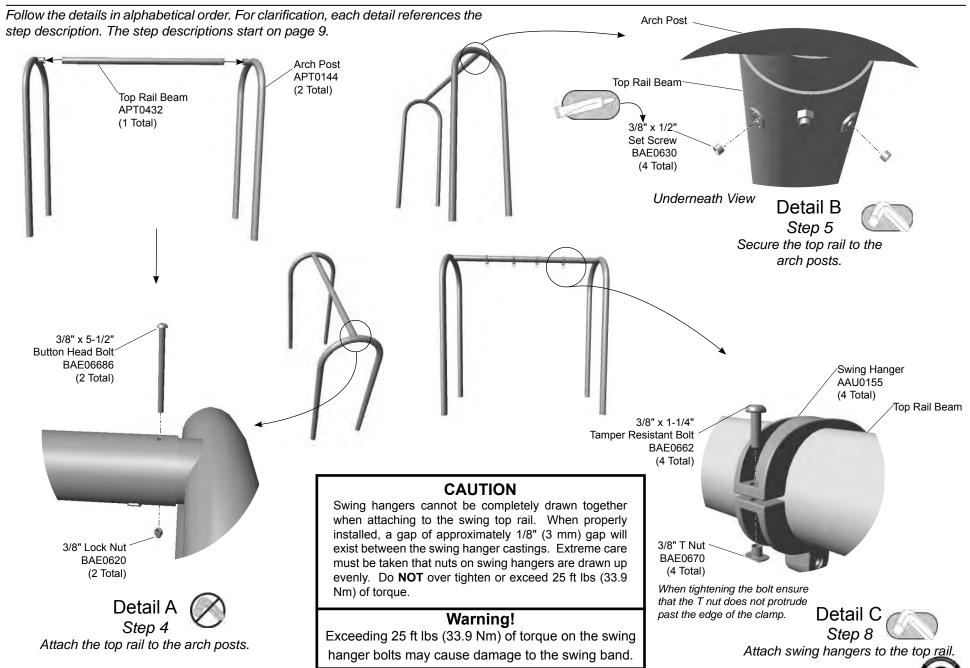
Recommended Crew:	Four (4) adults
Installation Time:	3 man-hours
Concrete Required:	0.48 cubic yard (0,37 cubic meters)
Use Zone:	Refer to Master Drawing
User Group Age (years):	ASTM/CSA: 2-12, EN: 2-14

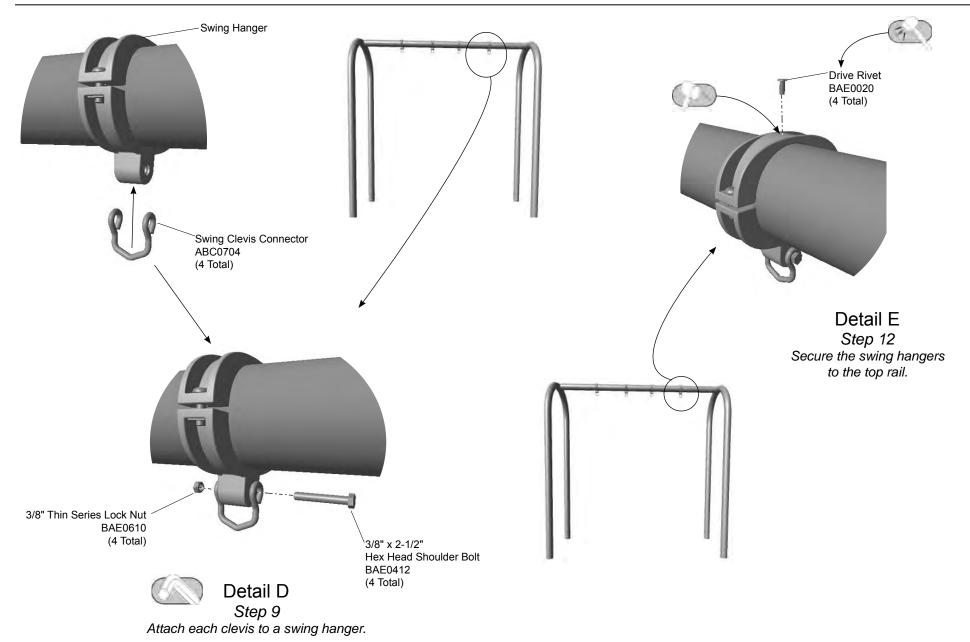






KEY





Model XX0287 ECN2147 SGS

**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.

Model XX0287

# 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® 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® 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.



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Model XX0287

FCN2447



# **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:

<u>Bolts and Nuts:</u> 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 color-matching paint and allow to dry. Recoat area with color-matching 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® 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	ection Date	Date Repairs Completed	
Inspect surfacing to insure proper depth and dis	stribution.	High				Inspection Codes
Inspect swing hangers for tightness and damag	e.	High				P = Pass F = Fail
Inspect metal parts for structural and finish dam	age.	Medium				NA = Not Applicable
Inspect for loose, missing, worn, or broken faste	eners.	High				
Inspect footing to insure support is secure and f	ooting is not damaged.	Low				]
						]
						<u> </u>
						<u> </u>
						]
Inspector: Name (Please Print)	Signature:				Da	ate://
MAINTENANCE SCHEDULE						
Item in Question	Description of Problem			Correct	ive Action	Date
Repairer: Name (Please Print)	Signature:	L			Dat	te:/



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.

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- 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)

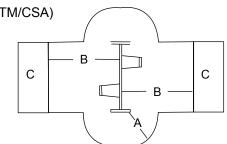
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Belt/Rigid Seat Swing Zones (ASTM/CSA)

**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.

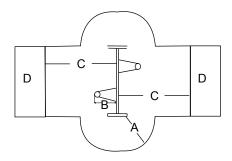
Infant Seat Swing Zones

**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)



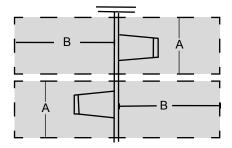
# (EN)

• 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 x Distance from pivot point to seat) + <u>either</u> 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.

Model XX0370 ECN2147

• The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. 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.

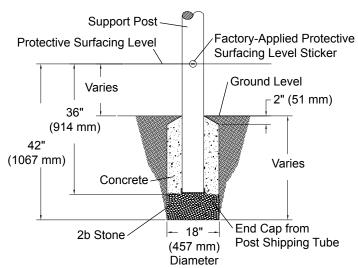
### **Maintenance**

• 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.

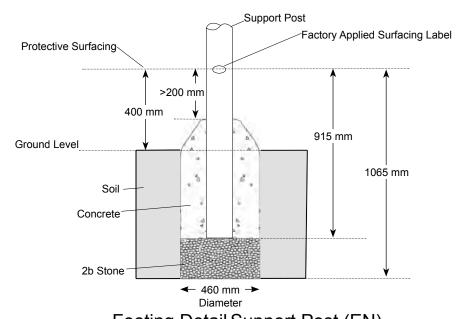
# **Supervision Guidelines**

- 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.





# Support Post Footing Detail (ASTM/CSA)



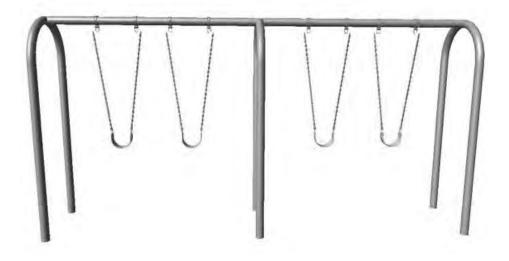
# **FOOTING NOTES**

- 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.

Model XX0370 ECN2147



# Installation Instructions Playworld Systems® Model XX0370 5 in. (127 mm) O.D. Aluminum Arch Swing 2-Unit Add-A-Bay



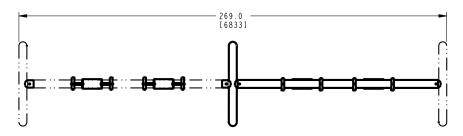
**Assembly View** 

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			

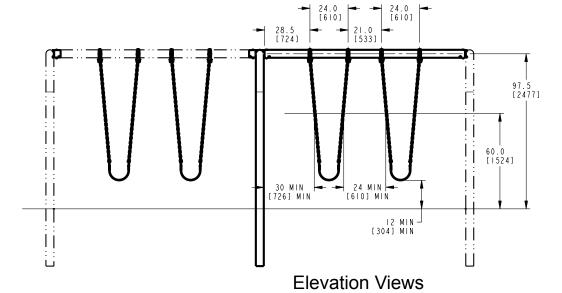
ICON KEY	,		
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
$\otimes$	Do <b>Not</b> Fully Tighten Hardware	(m)	Pour Concrete
	Drill		Dig Footing Holes
(F)	Hammer	z	Critical Fall Height

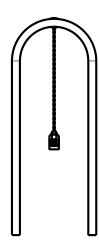
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

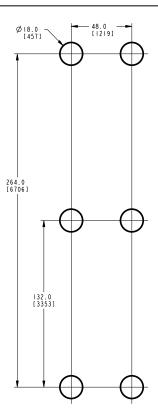
Top View



**Note:** Swing Hanger locations are dimensioned from end of the Top Rail to center of Swing Hanger.

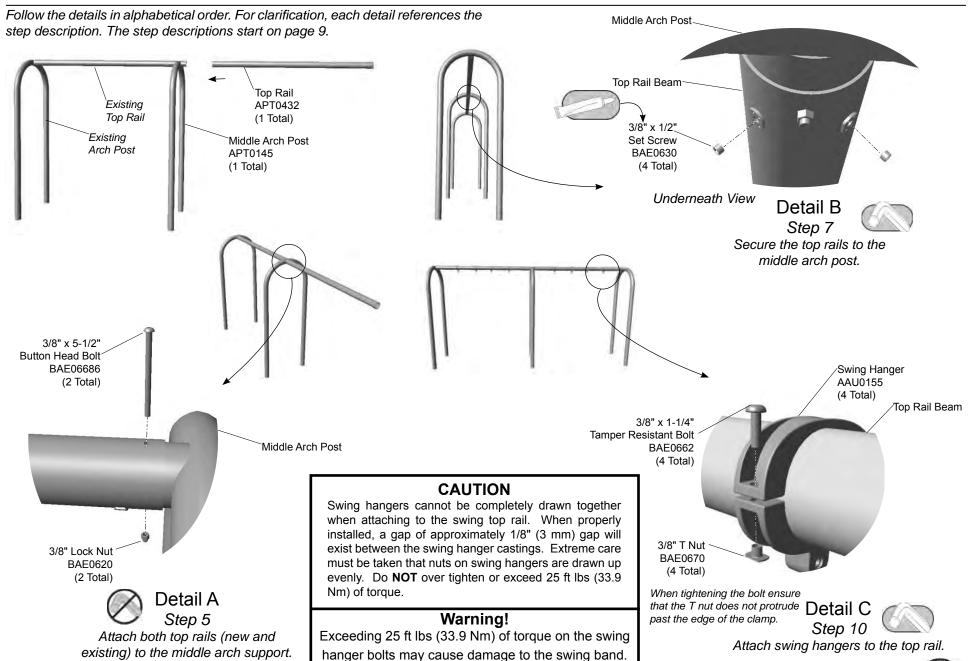


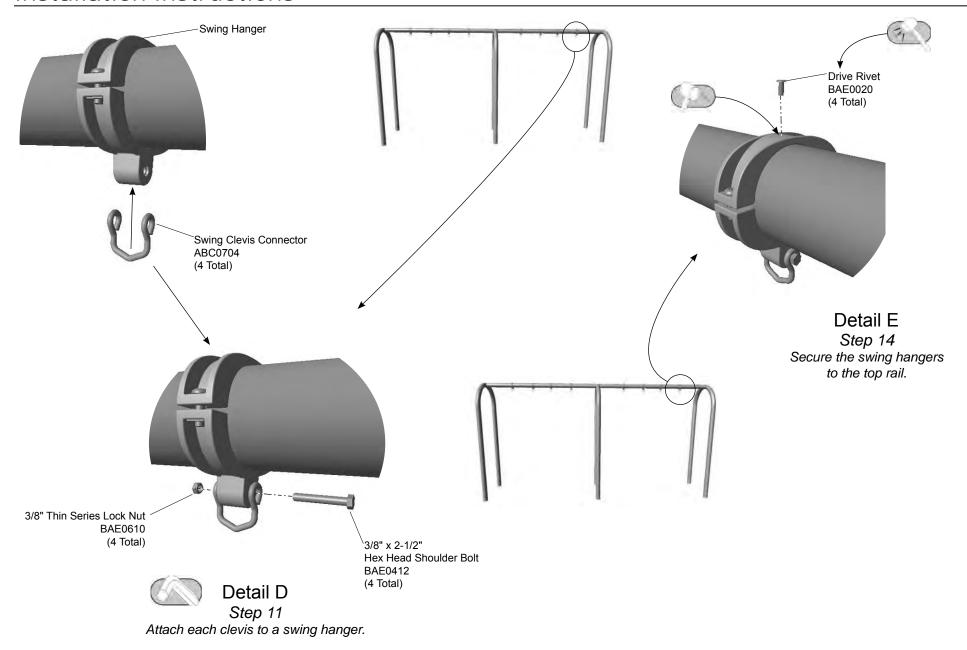




Footing Diagram







**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.

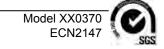
**Note:** This step should be executed after structure has been assembled and properly footed.

**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

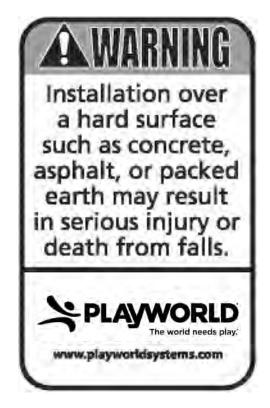




# **FINAL INSPECTION**

- Playworld Systems® 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® 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® 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.





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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:

<u>Bolts and Nuts:</u> 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 color-matching paint and allow to dry. Recoat area with color-matching 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.

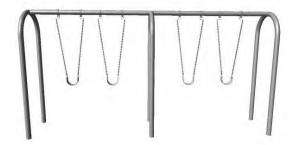
# Surfacing

 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® 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	ection Date	Date Repairs Completed	
Inspect surfacing to insure proper depth and d	istribution.	High				Inspection Cod
Inspect swing hangers for tightness and dama	ge.	High				P = Pass F = F
Inspect metal parts for structural and finish dar	nage.	Medium				NA = Not Applicat
Inspect for loose, missing, worn, or broken fas	teners.	High				
Inspect footing to insure support is secure and	footing is not damaged.	Low				
Inspector: Name (Please Print)	Signature:				Da	te://
Item in Question	Description of Problen	n e		Correct	ive Action	Date
Repairer: Name (Please Print)	Signature:	L			Dat	l e:/





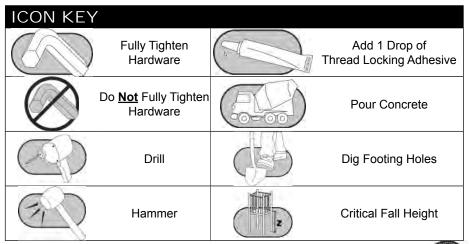
Assembly View

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

# 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** 

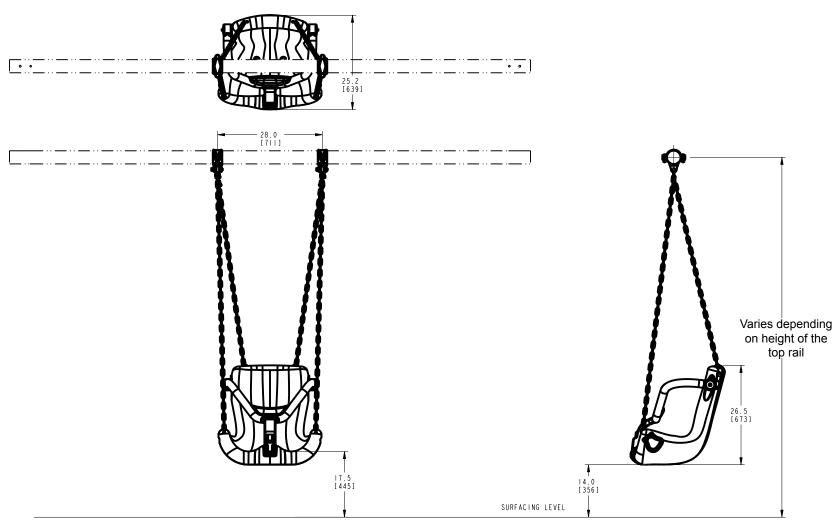
Recommended Crew:	One (1) adult
	0.5 man hour
Use Zone:	Refer to swing set instructions
	s): ASTM/CSA: 2-12, EN: 2-14



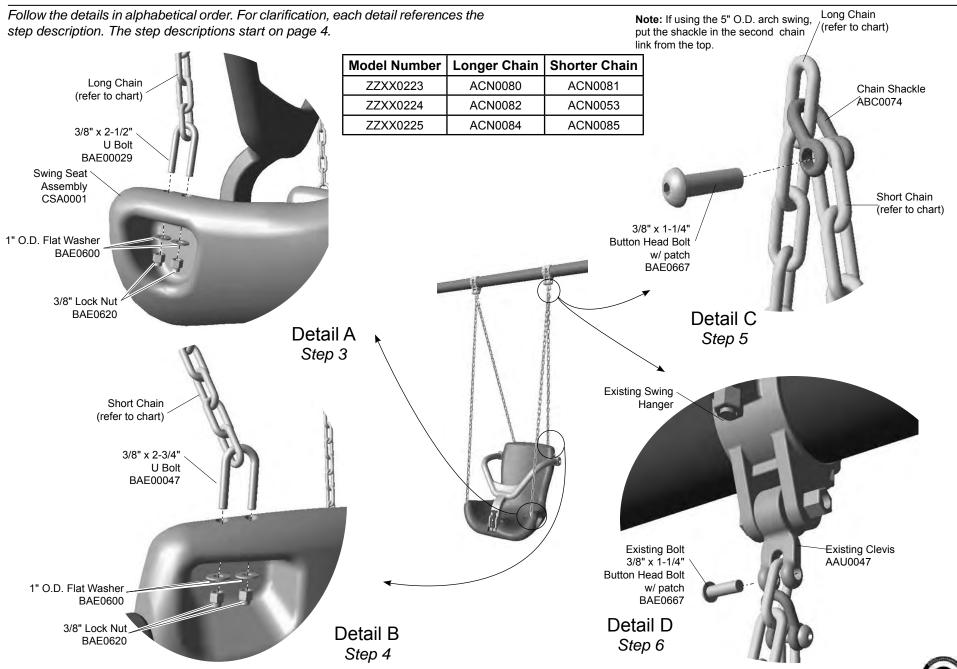
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0223	1240 mm	7 ft. (2135 mm)
ZZXX0224	1392 mm	8 ft. (2440 mm)
ZZXX0225	1697 mm	10 ft. (3050 mm)

Top View



**Elevation Views** 



\_\_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.

0224, ZZXX0225 ECN2065 SGS

# 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 color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

To repair the 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.





# 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				P = Pass F = Fail
Inspect metal parts for structural and finish dan	nage.	Medium				NA = Not Applicable
Inspect for loose, missing, worn, or broken fast	eners.	High				
Inspect footing to insure support is secure and	footing is not damaged.	Low				
Inspect surfacing to insure proper depth and dis	stribution.	High				
						]
						]
Inspector: Name (Please Print)	Signature:				Da	- ate: / /
MAINTENANCE SCHEDULE						
Item in Question	Description of Problem			Correct	ive Action	Date
Repairer: Name (Please Print)	Signature:				Dat	e://





### **Assembly View**

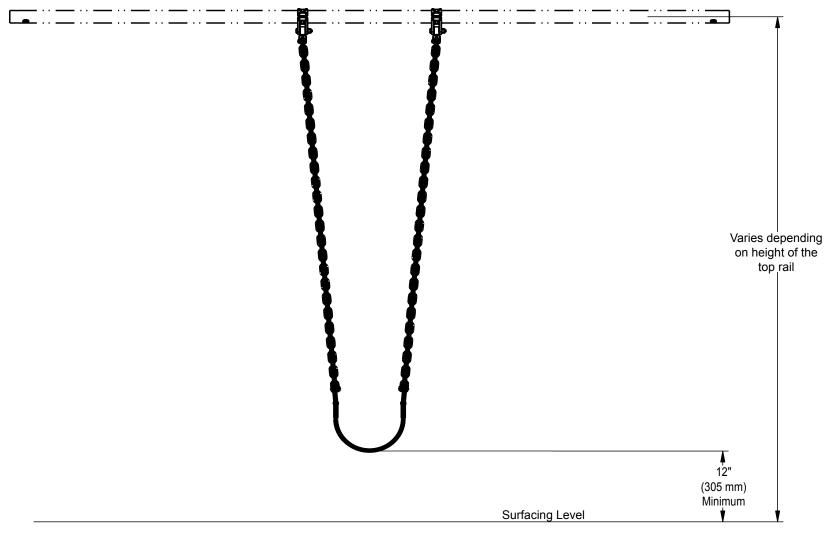
Refer to the Elevation View for the specific Critical Fall Height for the component.

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

**Installation Preparation** 

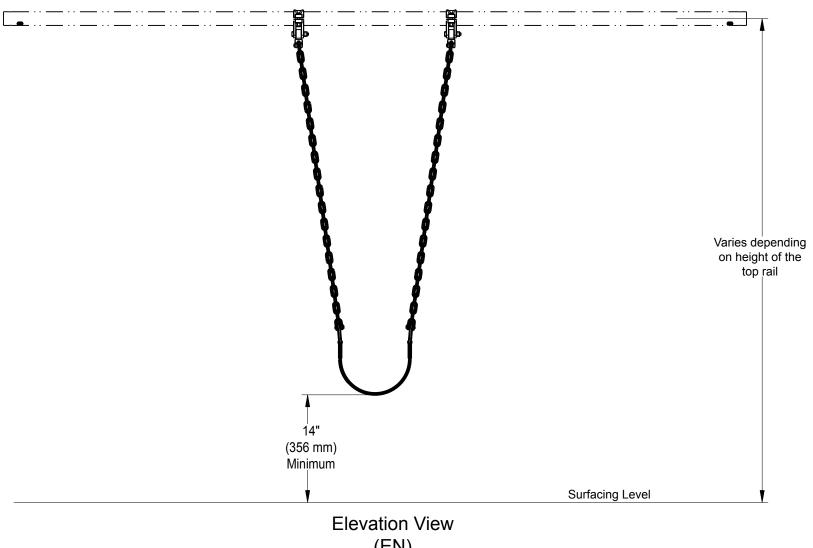
Recommended Crew:	One (1) adult
Installation Time:	0.25 hour
Use Zone:	Refer to the swing frame instructions
User Group Age (years):	ASTM/CSA: 2-12, EN: 2-14

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



Elevation View (ASTM/CSA)

Model Number	Critical Fall Height - ASTM/CSA	Top Rail Height
ZZXX0324	7 ft. (2134 mm)	7 ft. (2134 mm)
ZZXX0260	8 ft. (2440 mm)	8 ft. (2440 mm)
ZZXX0261	10 ft. (3050 mm)	10 ft. (3050 mm)

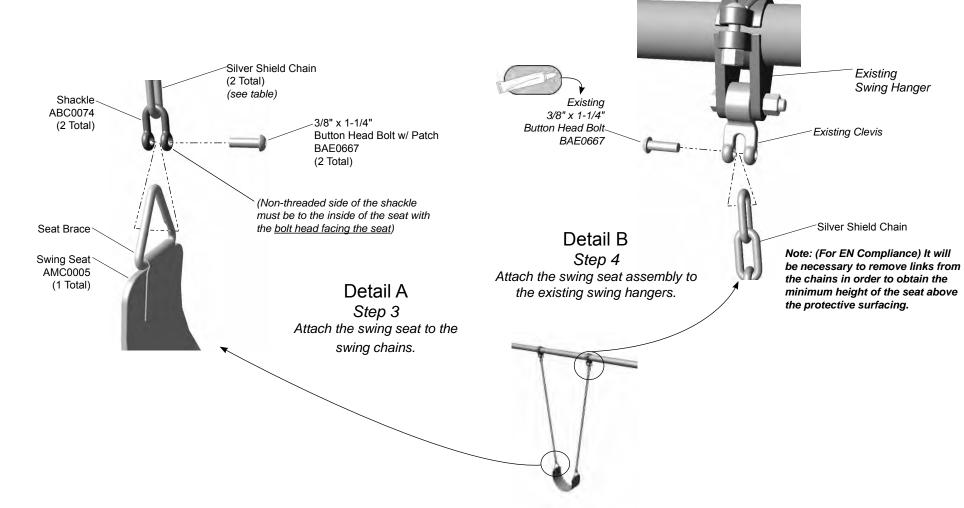


(EN)

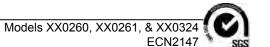
Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0324	1220 mm	7 ft. (2134 mm)
ZZXX0260	1370 mm	8 ft. (2440 mm)
ZZXX0261	1675 mm	10 ft. (3050 mm)



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



Model Number	Swing Chain Part No.	Top Rail Height
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





#### **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:
   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 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®
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 dis	stribution.	High				P = Pass F = Fail
Inspect metal parts for structural and finish dam	nage.	Medium				NA = Not Applicable
Inspect for loose, missing, worn, or broken faste	eners.	High				
Inspector: Name (Please Print)	Signature:				Da	ate://
MAINTENANCE SCHEDULE						
Item in Question	Description of Problem			Correct	ive Action	Date
Repairer: Name (Please Print)	Signature:	•			Dat	e://





### Assembly View

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

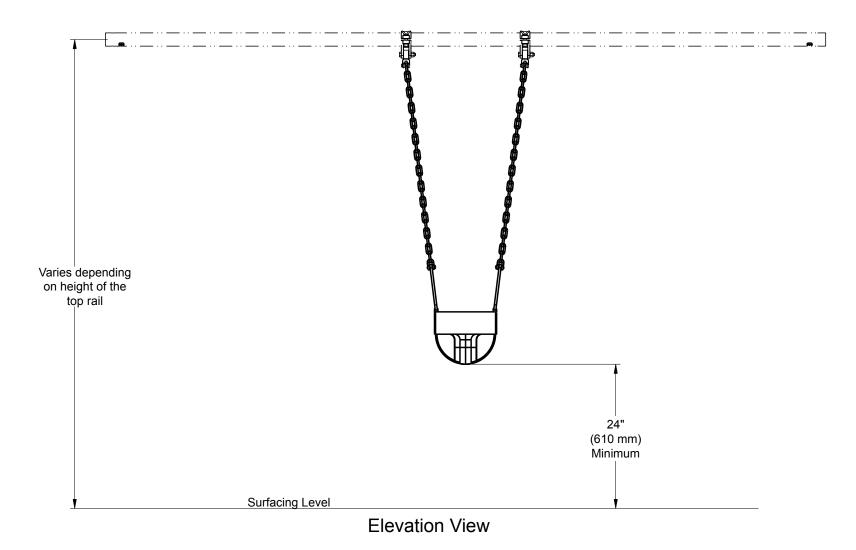
# Model Number Top Rail Height ZZXX0325 7 ft. (2134 mm) ZZXX0265 8 ft. (2440 mm) ZZXX0266 10 ft. (3050 mm)

# Installation Instructions Playworld Systems® 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

ICON KEY		
	Fully Tighten Hardware	

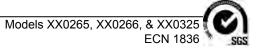


 Model Number
 Critical Fall Height - EN
 Top Rail Height

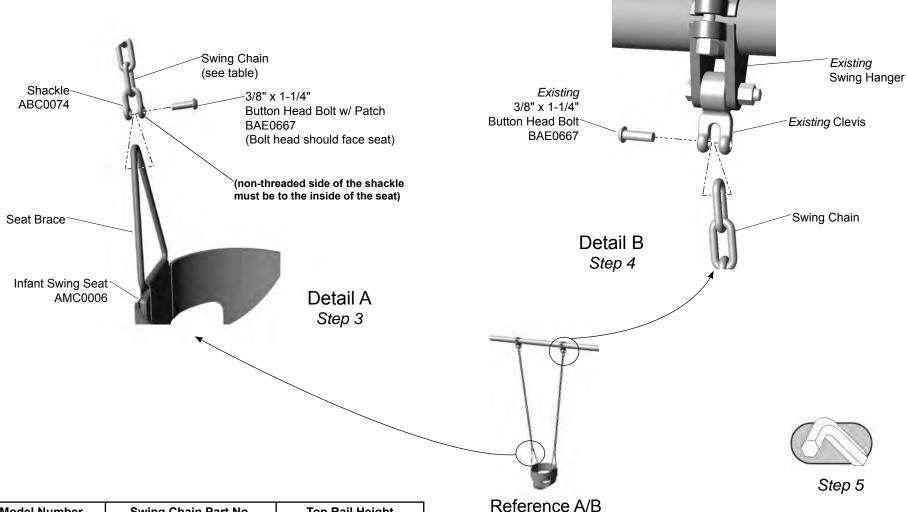
 ZZXX0325
 1345 mm
 7 ft. (2134 mm)

 ZZXX0265
 1525 mm
 8 ft. (2440 mm)

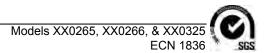
 ZZXX0266
 1830 mm
 10 ft. (3050 mm)



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



Model Number	Swing Chain Part No.	Top Rail Height
ZZXX0325	ACN0050	7 ft. (2134 mm)
ZZXX0265	ACN0040	8 ft. (2440 mm)
ZZXX0266	ACN0041	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.

#### 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

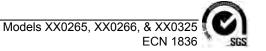
# ZZXX0265 - INFANT SWING SEAT WITH SWING CHAIN - 8 ft. (2438 mm) TOP RAIL HEIGHT

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:
   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.

#### **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®
Models XX0265, XX0266,
& XX0325
Infant Swing Seat with Swing
Chain





# Inspection Form

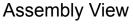
- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any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

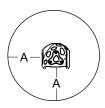
# Preventive Maintenance . . . for Safety's Sake!

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 dis	stribution.	High				P = Pass F = Fail
Inspect metal parts for structural and finish dam	nage.	Medium				NA = Not Applicable
Inspect for loose, missing, worn, or broken faste	eners.	High				
						_
						1
Inspector: Name (Please Print)  MAINTENANCE SCHEDULE	Signature:				D	ate://
Item in Question	Description of Problem			Correct	ive Action	Date
Repairer: Name (Please Print)	Signature:				Da	te://







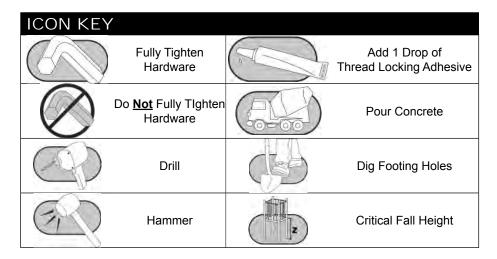


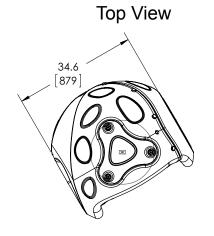
Equipment Use Zone A - (ASTM) 72 in. (1830 mm) (CSA) 1800 mm (EN) 2000 mm

# Installation Instructions Playworld Systems® Model XX0483 Cozy Cocoon Spinning Post Mount

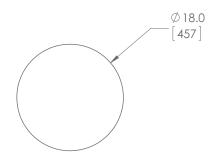
**Installation Preparation** 

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

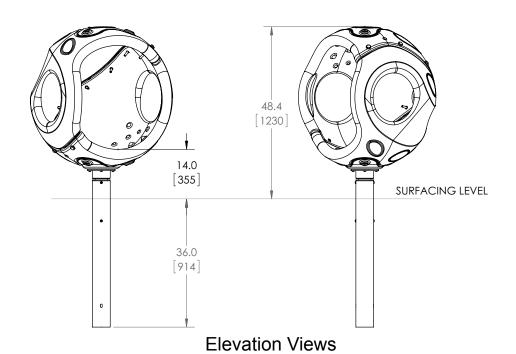


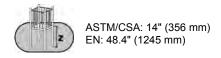


Unit of Measurement
Inches
[Millimeters]



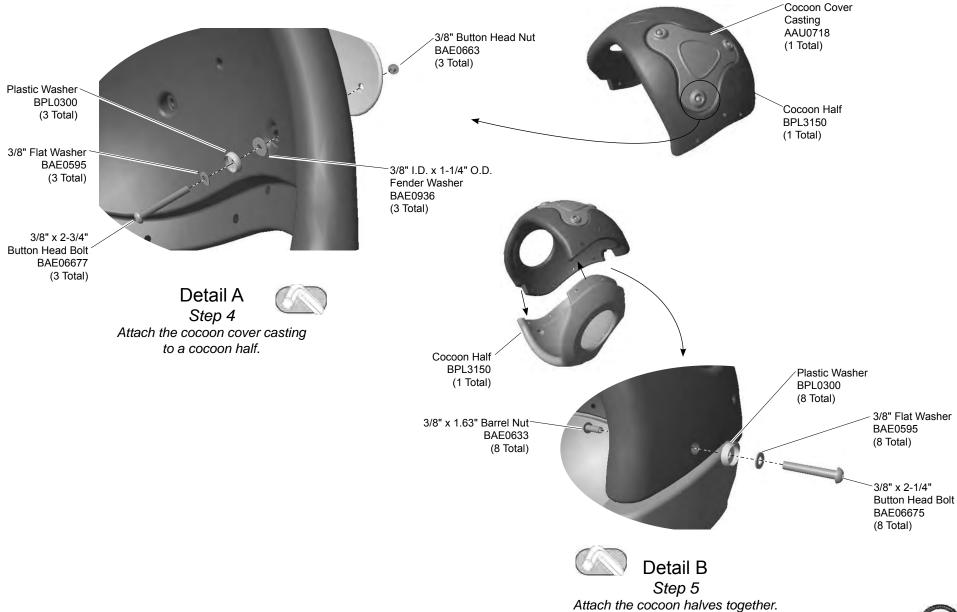
Footing Diagram



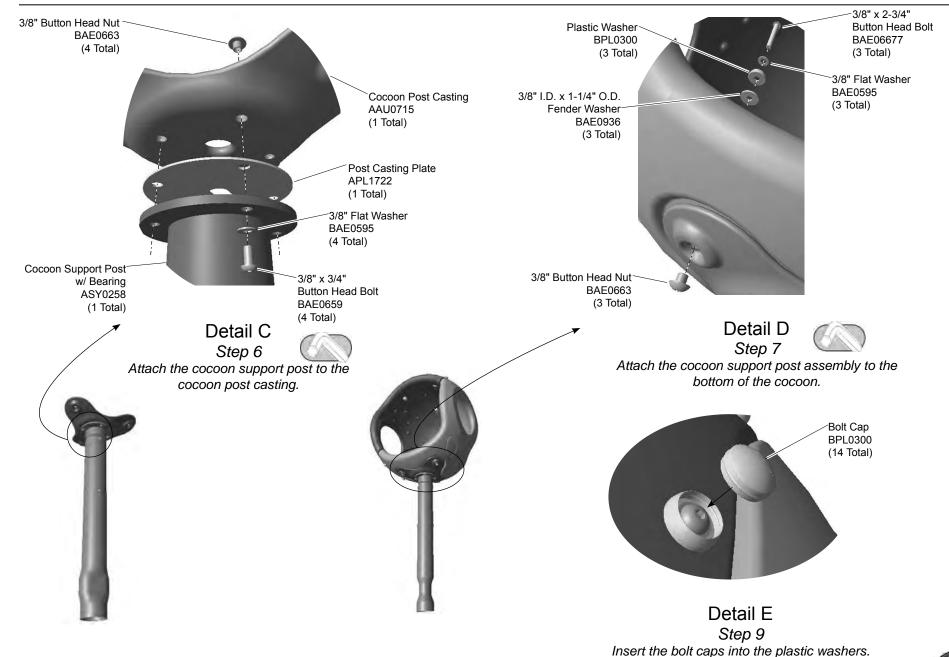




Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Model XX0483 PA1380



Model XX0483 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 F** 

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

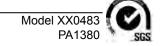
**Step 10:** For areas complying with ASTM standard F1487 or the CSAZ-614, apply the age appropriate label to the component at eye level or at a visible location.

Model XX0483 PA1380 SGS

#### **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:
   <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.

#### **Plastic Parts**

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

#### **Castings**

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

#### Welds

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

#### **Finish**

· Inspect metal parts for finish damage.

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

#### **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.

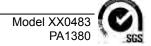
#### **Replacement Parts**

- 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® Model XX0483 Cozy Cocoon Spinning Post Mount







# Inspection Form

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- 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		Date Repairs Completed		
Inspect plastic parts for damage.						Inspection Codes	
Inspect for loose, missing, worn, or broken fasteners.						P = Pass F = Fail	
Inspect metal parts for structural and finish damage.						NA = Not Applicable	
Inspect surfacing to insure proper depth and distribution.							
Inspect footing to insure support is secure and	Low						
Inspector: Name (Please Print)	Signature:				Da	ate://	
Item in Question				Corrective Action D			
Repairer: Name (Please Print)	Signature:				Dat	e:/	



#### **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.

SGS SGS

#### **Guidelines**

- IMPORTANT! Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.
- The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. Critical fall heights for Europe and Canadian compliance shall be listed on the elevation page or master structure drawing if they differ from the ASTM standard. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

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

#### Maintenance

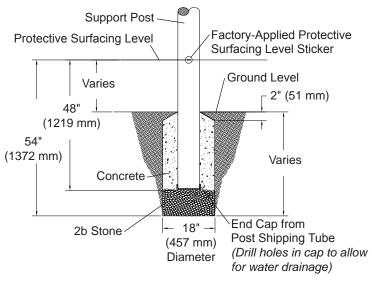
• Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, a comprehensive maintenance program must be developed for each playground and strictly followed. All equipment must be inspected frequently for any potential hazards. Special attention must 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**

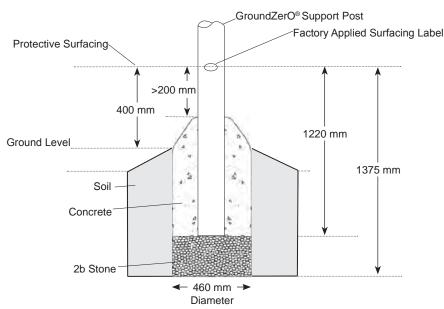
- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use 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.

of 6 SGS

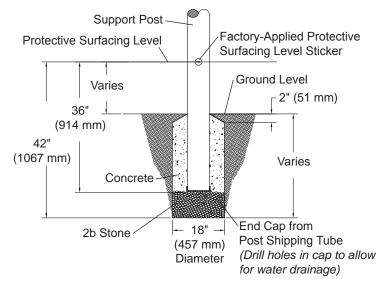
# **Footing Details (in ground)**



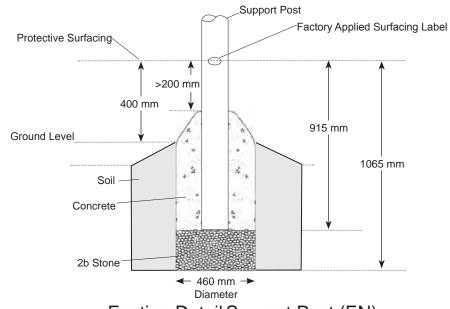
## GroundZerO® Support Post Footing Detail ASTM/CSA



Footing Detail GroundZerO® Support Post (EN)



Support Post Footing Detail (ASTM/CSA)



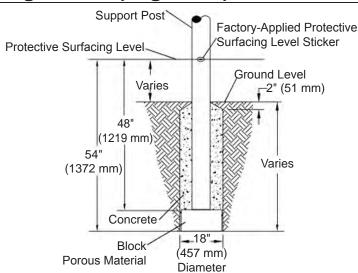
Footing Detail Support Post (EN)

Annex Page 3 of 6

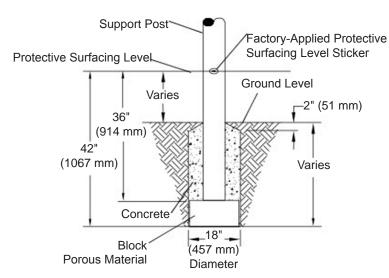
**Guidelines & Information (fs RPE)** 

# **Footing Details (in ground)**

# **Footing Notes**



## GroundZerO® Support Post Footing Detail ASTM/CSA Block Option



Support Post Footing Detail (ASTM/CSA)
Block Option

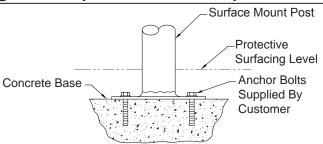
#### **FOOTING NOTES (IN GROUND)**

- 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® 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)**



Surface Mount Footing Detail

## **Footing Notes**

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

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



**Surfacing Warning Label** 



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.
- 7. 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> Safety (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
   -Children's Playspaces and Equipment 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 <a href="http://www.csa.ca">http://www.csa.ca</a> (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

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

# 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).
- 14. Attach swings, rings, and tire swings after resilient surfacing material is in place. Completely close all "S" hooks. See ASTM Requirements for Fastening Devices in Figures 9 12 (located on page 13).
- 15. Attach Warning and Manufacturer labels. See Warning and Manufacturer Labels for instructions and Figures 13 14 (located on pages 14 15).
- 16. After installation is complete, inspect the entire unit. Make sure all fastening hardware and setscrews are tight, and all drive pins and rivets have been installed. Make sure all "S" hooks are completely closed. Check all coated parts to ensure coating is covering all metal; if not, follow repair instructions listed in the Maintenance section.

#### GENERAL INSTALLATION GUIDELINES

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 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).

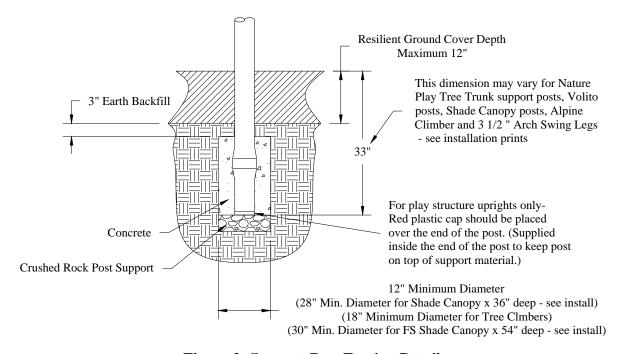


# **NO IMPACT WRENCHES**

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

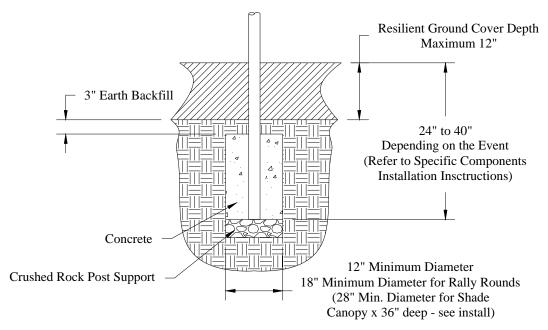


Figure 3: Play Event Footing Detail

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)

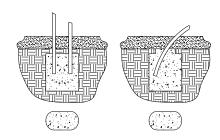


Figure 4: Optional Play Event Footing

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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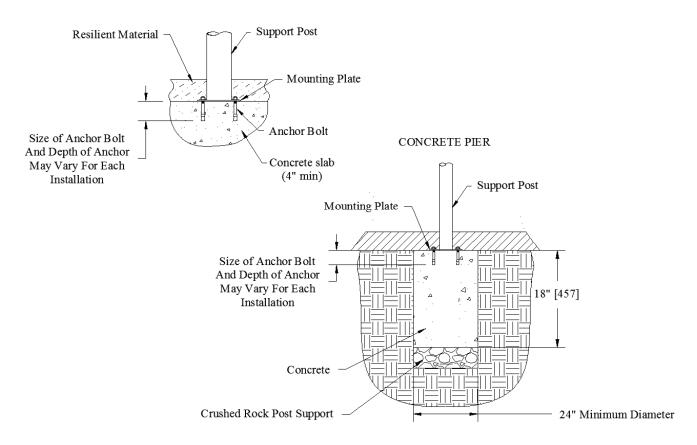
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# TYPICAL CONCRETE FOOTINGS

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.)

9 OVERHEAD SNAKE RIGHT 90° **SLIDING** TRIPLE RAIL SLIDE POLE 6' <u>ASTM\_</u>F1487 48" ROCK 48 ASTM F1487-98 CLIMBER PIPE WALL TRANSFER PIPE WALL STEERING WHEEL POINT 60" DIA SKY PODS TRANSFER STAIR ARCHED LADDER 8" TRANSFER STEP CENTIPEDE CLIMBER ŵ USE ZONE USE ZONE

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# Figure 6: Sample Site Plan Drawing RESILIENT SURFACING MATERIAL

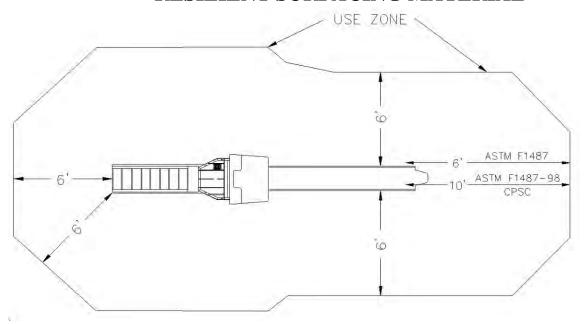


Figure 7: Use Zone for Slides

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

To the front and to the rear of to-fro swings, the use zone should extend a "minimum distance of 2X on a line extending  $90^{\circ}$ 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

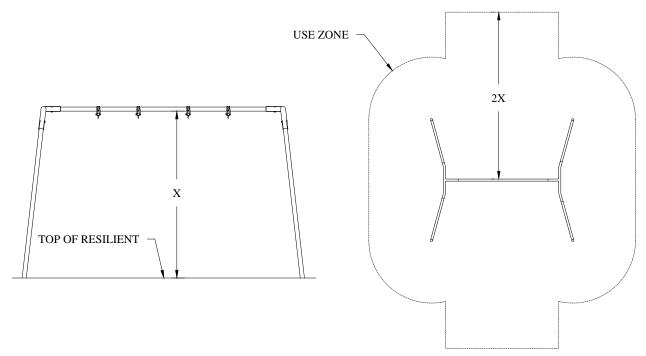


Figure 8: Use Zones for To-Fro Swings

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.

Table 1: CPSC Critical Fall Heights (taken from pub. 325, page 10)

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

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

# ASTM REQUIREMENTS FOR FASTENING DEVICES

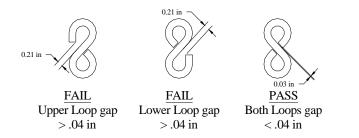


Figure 9: Check loops for .04" gap

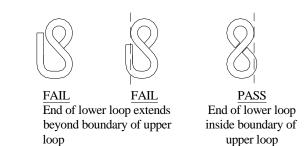


Figure 10: Check lower loop projection



Figure 11: Check upper loop projection

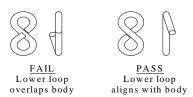


Figure 12: Check lower loop alignment

#### 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**

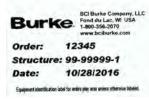
- Choose highly visible label locations at a height of 4' to 5' above the resilient surfacing material. See Figure 13.
- The preferable location would be out of direct sunlight.
- Posts are the best location for labels. Do not place on PVC coated items or areas of high wear.
- Surface must be clean and 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.







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.



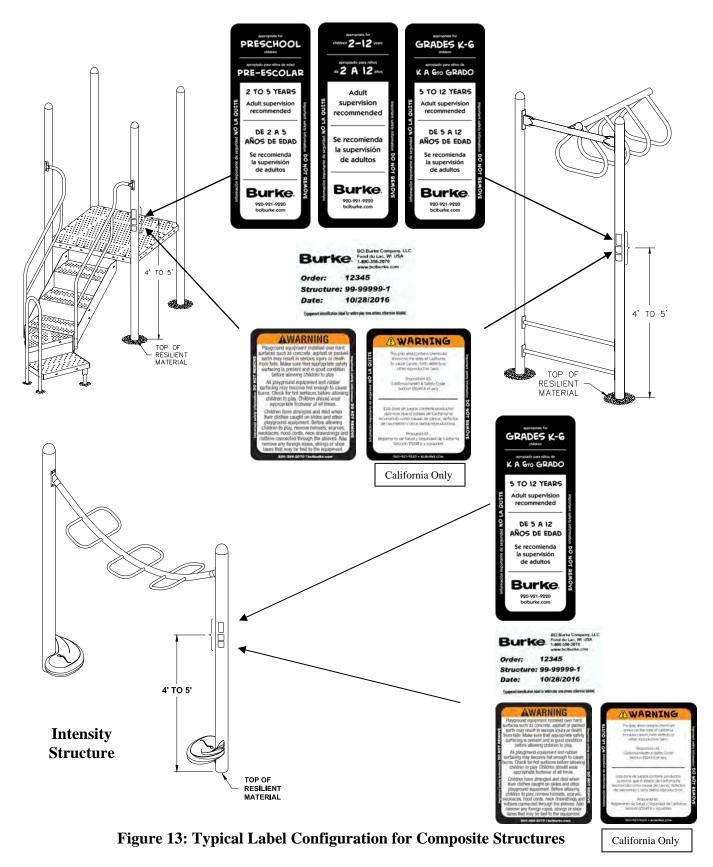


Warning Labels - Place one directly underneath each of the Age-appropriate Safety Labels and/or Manufacturer's Identification Label. If you have additional labels they should be placed near other entrances on opposite sides of the structure. Warning Labels are a Requirement in the ASTM F1487 Standard 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



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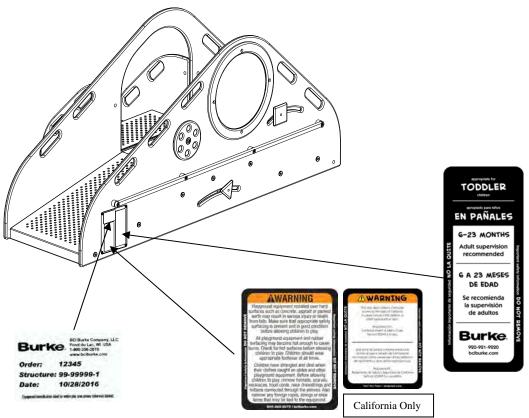


Figure 14: Typical Label Configuration for Composite Structures

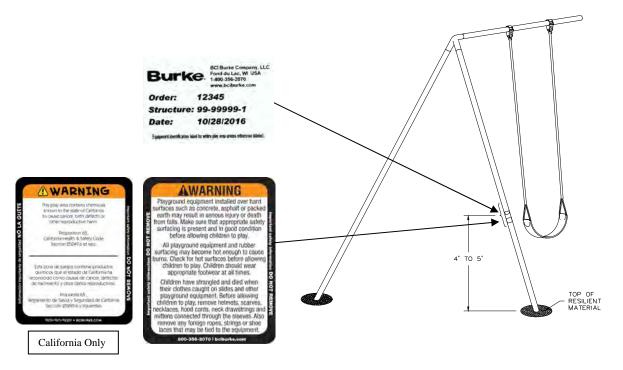


Figure 15: Typical Label Configuration for Non-Age Specific Equipment

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# 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.
- 6. Continue to tighten canopy by carefully pulling tensioning arms down into 'Closed Position'. If canopy is too tight to pull arm down, loosen turnbuckle tension a small amount. See Figure 18.

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

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

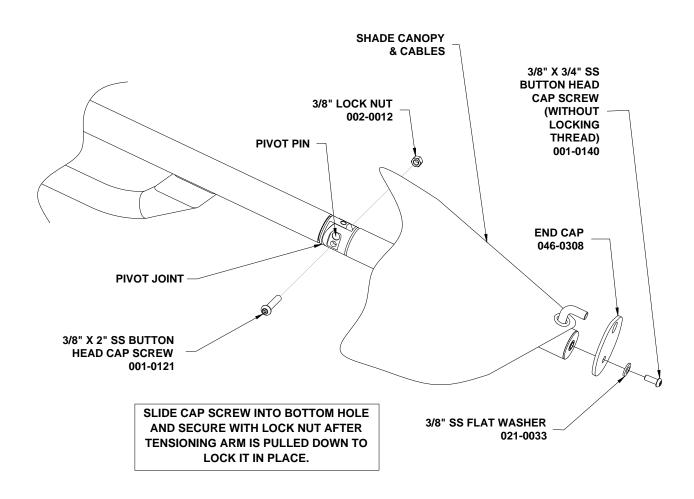


Figure 16: Tensioning Arm in 'Closed Position'

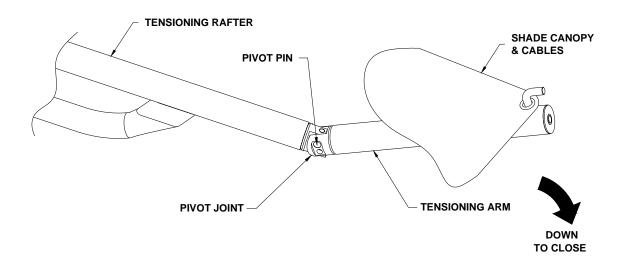


Figure 17: Tensioning Arm in 'Open Position'

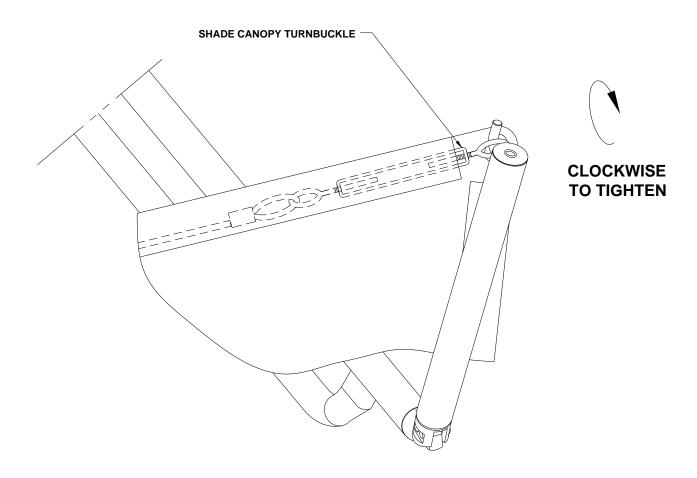


Figure 18: Tightening/Loosening Shade Canopy Turnbuckle

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# **Sensory Panel Maintenance and Troubleshooting**

#### **Care and Maintenance**

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

#### Cleaning

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

#### **Speaker Grill**

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

#### **Troubleshooting Guide**

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.

Fault	Solution
No sound or intermittent sound with older batteries	<ul> <li>Check that batteries are firmly seated between the terminals in the battery holder and are in the correct orientation. Check that the speaker and sensor connectors are securely seated.</li> <li>Make certain that the sound chip on the printed circuit board has not been dislodged. If you suspect that it is dislodged, see the instructions below.</li> <li>Replace the batteries with high-quality alkaline batteries (i.e. Duracell Ultra or better).</li> </ul>
	ŕ
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	X		X	X		
Daily	Broken Anchor Bolts	X	X	X	X	X	X
Daily	Worn Chains	X		X	X		
Daily	Broken Guardrails/Handrails	X	X	X	X	X	X
Daily	Sharp Edges	X	X	X	X	X	X
Daily	Loose or Missing Nuts/Bolts	X	X	X	X	X	X
Daily	Sharp Points/Protrusions	X	X	X	X	X	X
Daily	Unplugged Holes in Pipe	X	X	X	X	X	X
Daily/Weekly	Broken Welds	X	X	X	X	X	X
Daily/Weekly	Inadequate Surfacing	X	X	X	X	X	X
Daily/Weekly	Ropes for cuts or fraying with exposed steel reinforcement strands			X	X		
Daily/Weekly	Vandalized or Cracked PVC Coating	X		X	X		
Weekly	Worn Pinions/Clevises	X		X	X		
Weekly	Exposed Footings	X	X	X	X	X	X
Weekly	Worn Bearings	X			X		X
Weekly	Rust of Metal	X	X	X	X	X	X
Weekly	Corrosion of Aluminum	X	X	X	X	X	X
Monthly	Add grease lubrication to wheel bearings	X			X		X
Monthly	Play Mat (integrity and adhesion to surface if applicable)	X	X	X	X	X	X
Spring/Fall	Pinch Points	X	X	X	X	X	X
Inclement Weather (High winds, Snow)	Remove Shade Canopy				X		

# **General Maintenance Checklist**

Date	1								1	1		
_ ****												
Visible cracks, bending, warping												
Accessible sharp edges or points												
Rusted metal surfaces												
Rusting of metal and corrosion on												
aluminum												<b></b>
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												
· · · · · · · · · · · · · · · · · · ·	 - 1	1	1	1	1	L	L	L	L	l		

#### **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®

# 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® 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

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.

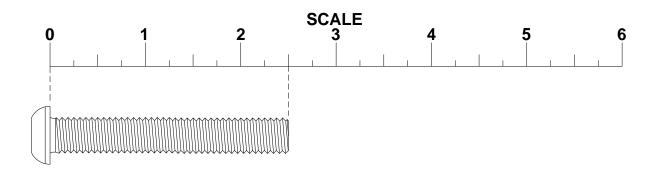
**Installation:** All equipment is shipped unassembled. For a list of factory-certified installers in your area, please contact your Burke representative.

**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.

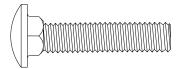
**Loss or Damage in Transit:** A signed bill of lading is our receipt from a carrier that our shipment to you was complete and in good condition upon arrival. Before you sign, please check the Bill of Lading carefully when the shipment arrives to make sure nothing is missing and there are no damages.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

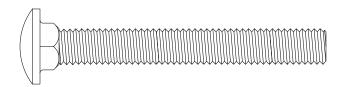


001-0116 - 3/8" X 3/4" SS BUTTON HEAD CAP SCREW
001-0117 - 3/8" X 1" SS BUTTON HEAD CAP SCREW
001-0118 - 3/8" X 1 1/4" SS BUTTON HEAD CAP SCREW
001-0119 - 3/8" X 1 1/2" SS BUTTON HEAD CAP SCREW
001-0120 - 3/8" X 1 3/4" SS BUTTON HEAD CAP SCREW
001-0121 - 3/8" X 2" SS BUTTON HEAD CAP SCREW
001-0122 - 3/8" X 2 1/4" SS BUTTON HEAD CAP SCREW
001-0123 - 3/8" X 2 1/2" SS BUTTON HEAD CAP SCREW
001-0140 - 3/8" X 3/4" SS BUTTON HEAD CAP SCREW
001-0140 - 3/8" X 3/4" SS BUTTON HEAD CAP SCREW W/OUT LOCKING THREAD
001-0143 - 3/8" X 1/2" SS BUTTON HEAD CAP SCREW
001-0152 - 3/8" X 1 1/4" SS BUTTON HEAD CAP SCREW W/OUT LOCKING THREAD
001-0153 - 3/8" X 1 1/2" SS BUTTON HEAD CAP SCREW W/OUT LOCKING THREAD
001-0155 - 3/8" X 1" SS BHCS W/O LOCKING THREAD
001-0165 - 3/8" X 3/8" SS BUTTON HEAD CAP SCREW



001-0083 - 1/4" X 1 1/4" CARRIAGE BOLT

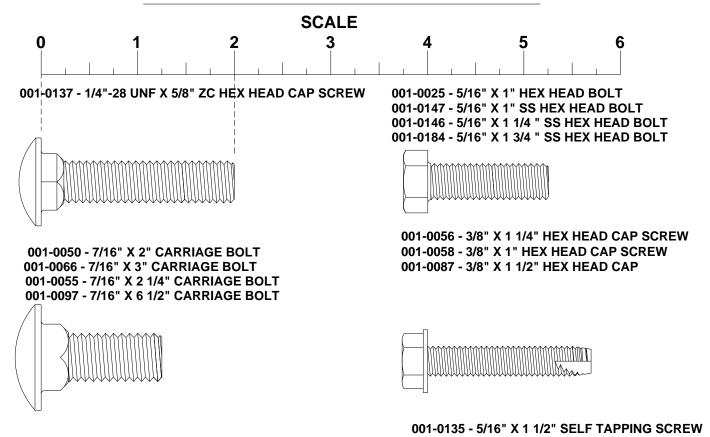
001-0010 - 5/16" X 3/4" CARRIAGE BOLT 001-0163 - 5/16" X 1 1/2" CARRIAGE BOLT 001-0074 - 5/16" X 4 1/4" CARRIAGE BOLT 001-0082 - 5/16" X 2 3/4" CARRIAGE BOLT 001-0080 - 5/16" X 2" CARRIAGE BOLT 001-0077 - 5/16" X 1 1/4" CARRIAGE BOLT 001-0081 - 5/16" X 2 1/4" CARRIAGE BOLT



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" 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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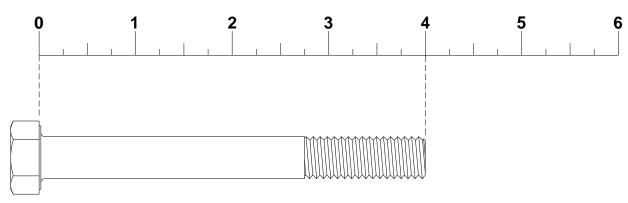


001-0141 - 1/2" X 1 1/4" CARRIAGE BOLT



001-0023 - 3/8" X 2 3/4" HEX HEAD CAP SCREW 001-0046 - 3/8" X 4 1/2" HEX HEAD CAP SCREW 001-0072 - 3/8" X 2" HEX HEAD CAP SCREW 001-0073 - 3/8" X 3 3/4" HEX HEAD CAP SCREW 001-0134 - 3/8" X 3 1/2" HEX HEAD CAP SCREW 001-0076 - 3/8" X 3 1/4" HEX HEAD CAP SCREW 001-0084 - 3/8" X 2 1/4" HEX HEAD CAP SCREW 001-0089 - 3/8" X 3" HEX HEAD CAP SCREW 001-0090 - 3/8" X 5" HEX HEAD CAP SCREW 001-0101 - 3/8" X 4" HEX HEAD CAP SCREW





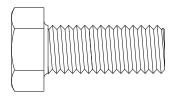
001-0096 - 7/16" X 3 1/2" HEX HEAD CAP SCREW 001-0132 - 7/16" X 4" HEX HEAD CAP SCREW

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

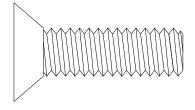


001-0037 - 7/16" X 3" HEX HEAD CAP SCREW - SLOTTED 001-0047 - 7/16" X 4 1/2" HEX HEAD CAP SCREW - SLOTTED

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



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



001-0139 - 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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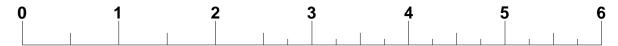
SCALE 0 2 3 019-0002 - 3/16" X 7/8" DRIVE RIVET 019-0004 - 3/16" X 1 5/32" RIVET 002-0053 - 3/8" X 1/2" SS SOCKET HEAD BARREL NUT 002-0063 - 3/8" X 3/8" SS SOCKET HEAD BARREL NUT 019-0010 - 5/32" X 3/8" DRIVE RIVET 002-0062 - 3/8" X 3/4" SS SOCKET HEAD BARREL NUT 019-0016 - 1/8" X 15/32" DRIVE RIVET 019-0020 - 1/4" X 1/2" DRIVE RIVET 019-0009 - 1/4" X 3/4" DRIVE RIVET 002-0040 - 3/8" SS T-NUT FORMED 002-0028 - 1/4" T-NUT 002-0061 - 3/8" NUT INSERT (7 GA GRIP) 002-0042 - 3/8" NUT INSERT

021-0022 - 3/8" LOCK WASHER

BCI Burke Company, LLC 021-0027 - 7/16" LOCK WASHER

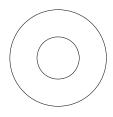
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### **SCALE**

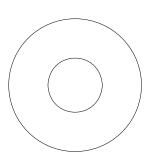




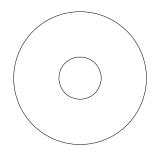
021-0032 - 5/16" SS FLAT WASHER 021-0028 - 5/16" FLAT WASHER



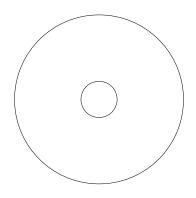
021-0033 - 3/8" SS FLAT WASHER 021-0029 - 3/8" FLAT WASHER



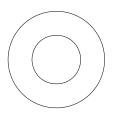
021-0025 - 1/2" FLAT WASHER 021-0034 - 1/2" SS FLAT WASHER



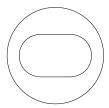
021-0008 - 1 3/8" OD WASHER



021-0012 - 3/8" X 1 3/4" WASHER 021-0001- 1 3/4" OD X 13/16" ID X 3/32" WASHER



021-0042 - WASHER, NYLON, 1/2" ID X 1" OD X .125 THK



021-0019 - 3/8" X 1" OD SLOTTED WASHER

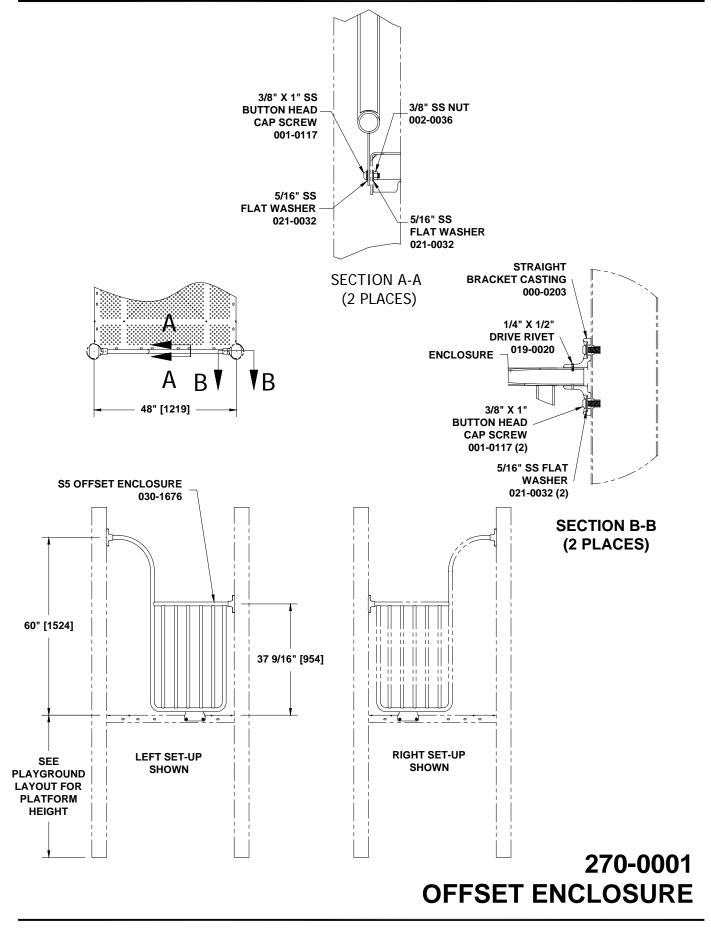
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**Installation Instructions** 





PARTS LIST			
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>	
000-0203	CASTING, STRAIGHT BRACKET	2	
030-1676	S5 OFFSET ENCLOSURE	1	
036-1284	HARDWARE PACKAGE	1	

<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.

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

SHIPPING WEIGHT: 30 LBS.

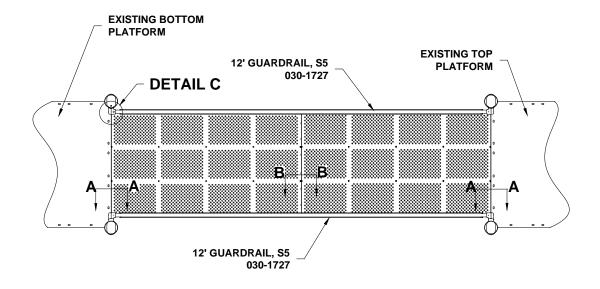
### **INSTALLATION INSTRUCTIONS**

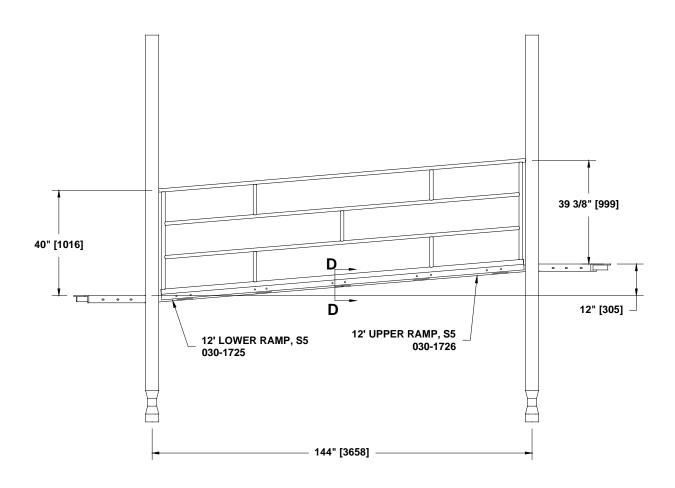
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

- 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.

270-0001.doc Description: OFFSET ENCLOSURE REV: 01 PCN: 14-0254 10/20/2014

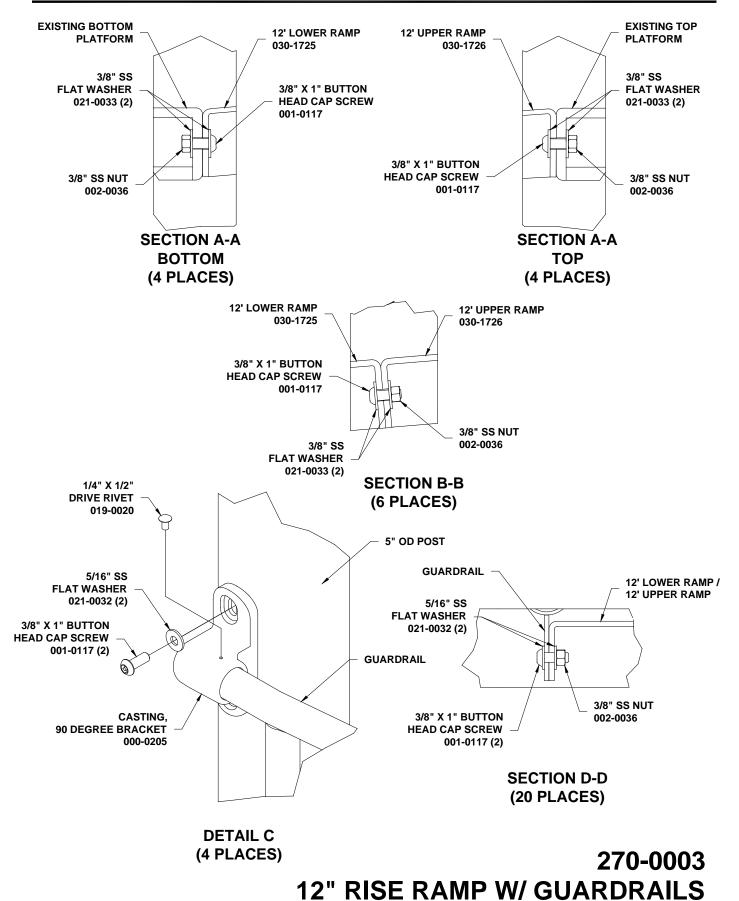






## 270-0003 12" RISE RAMP W/ GUARDRAILS





PART NO.	PARTS LIST	QTY
000-0205	CASTING, 90 DEGREE BRACKET	4
030-1725	12' LOWER RAMP, S5	1
030-1726	12' UPPER RAMP, S5	1
030-1727	12' GUARDRAIL, S5	2
036-1114	HARDWARE PACKAGE	1

<u>CASTING, 90 DEGREE BRACKET</u>: 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.

<u>HARDWARE PACKAGE</u>: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.

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

SHIPPING WEIGHT: 509 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.

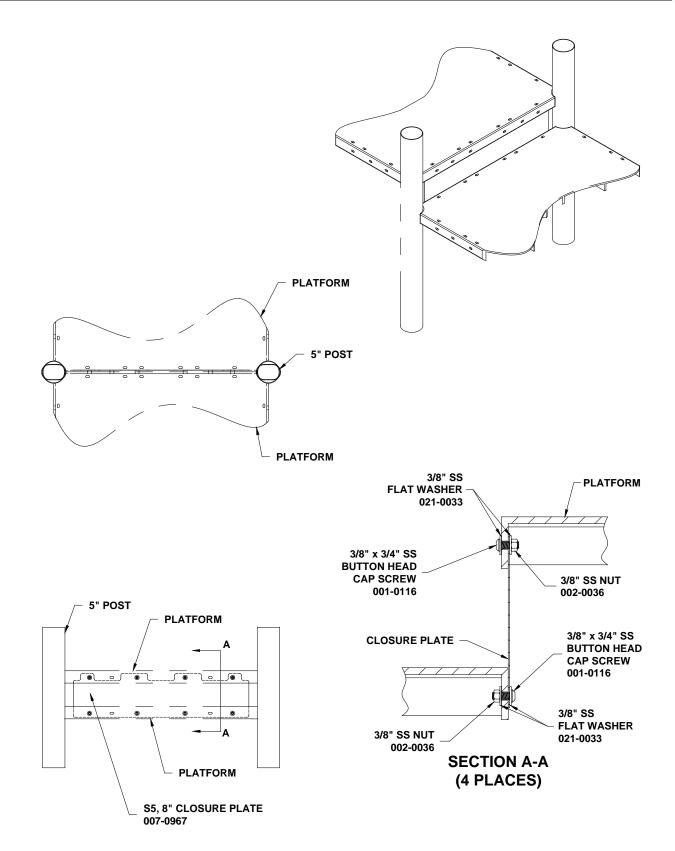
- 1. Determine location of 12" rise ramp.
- 2. Support upper of 12' lower ramp.
- 3. Attach 12' LOWER RAMP to existing lower platform using 3/8" X 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION A-A BOTTOM.
- 4. Attach 12' UPPER RAMP to existing upper platform and 12' lower 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.	PARTS LIST <u>DESCRIPTION</u>	<u>QTY</u>
007-0967 036-1102	S5 8" CLOSURE PLATE HARDWARE PACKAGE	1 1
Note: Hardw that is not no	vare package(s) may include extra har ecessary for this installation.	rdware

<u>S5 8" CLOSURE PLATE</u>: 14 GA galvanized steel plate finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steeel

SHIPPING WEIGHT: 10 LBS.

### **INSTALLATION INSTRUCTIONS**

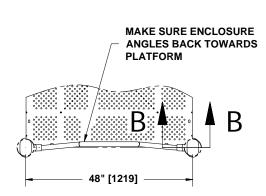
NOTE: PVC coating may need to be removed from mounting holes of platforms before installation.

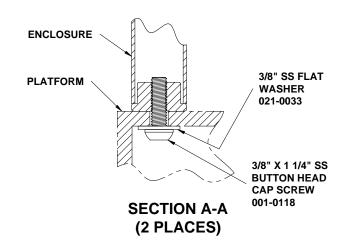
- 1. Attach CLOSURE PLATE to upper and lower platform using 3/8" x 3/4"SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. See SECTION A-A.
- 2. Tighten hardware.

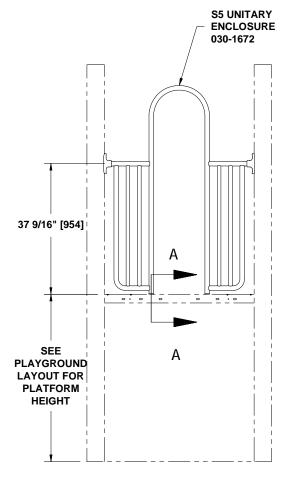
270-0050.doc Description: 8" CLOSURE PLATE

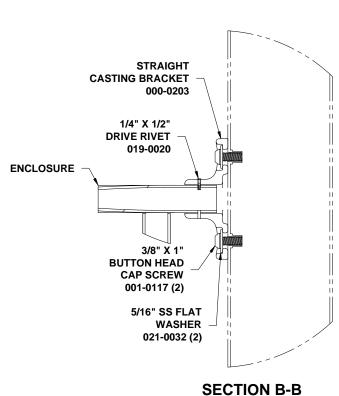
REV: 02 PCN: 13-0089 5/10/2013











## 270-0112 UNITARY ENCLOSURE

(2 PLACES)

I AKTO LIST				
PART NO.	<b>DESCRIPTION</b>	QTY		
000-0203	CASTING, STRAIGHT BRACKET	2		
030-1672	S5 UNITARY ENCLOSURE	1		
036-0197	HARDWARE PACKAGE	1		
036-0819	HARDWARE PACKAGE	1		

DADTELIET

### **SPECIFICATIONS**

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

<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.

HARDWARE PACKAGE: Stainless steel.

HARDWARE PACKAGE: Aluminum Rivets

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

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.

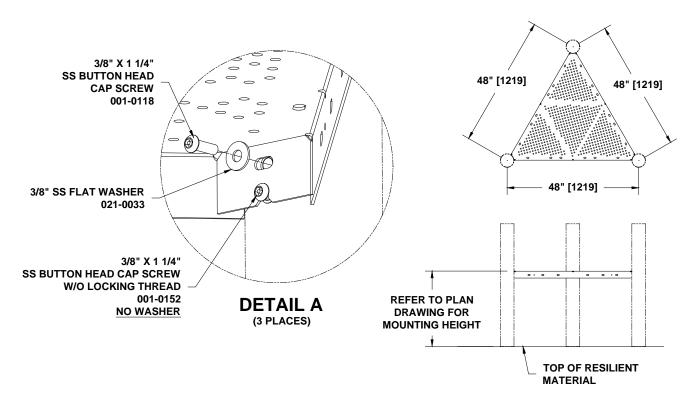
NOTE: Make sure enclosure angles back towards platform. (See Top View)

- 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.

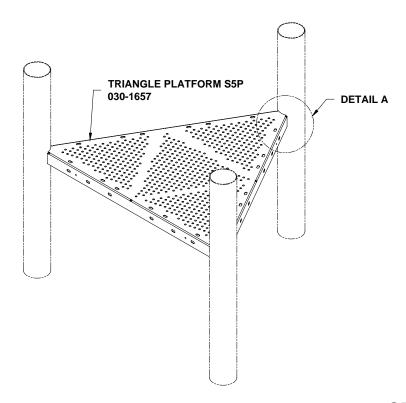
270-0112.doc Description: UNITARY ENCLOSURE

REV: 01 PCN: 10-0270 11/5/2010





### **ELEVATION VIEW**



## 270-0129 TRIANGLE PLATFORM S5P

# PARTS LIST PART NO. DESCRIPTION QTY 030-1657 TRIANGLE PLATFORM S5P 1 036-1100 HARDWARE PACKAGE 1

TRIANGLE PLATFORM S5P: 12 GA HRPO sheet, finished with a PVC Coating
HARDWARE PACKAGE: Stainless steel

**SPECIFICATIONS** 

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

SHIPPING WEIGHT: 48 LBS.

### **INSTALLATION INSTRUCTIONS**

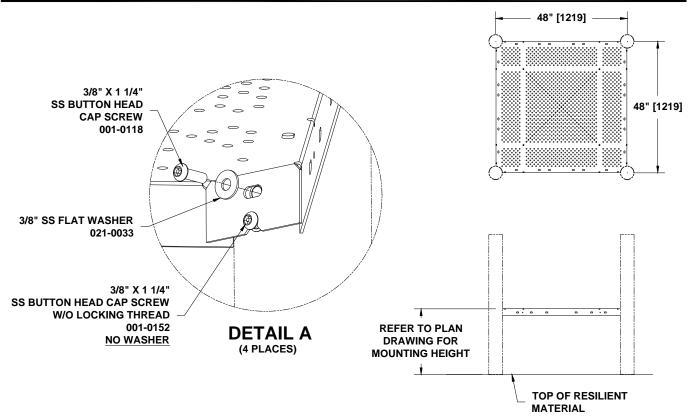
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Locate the double sets of platform mounting holes in each post.
- 2. Partially thread a 3/8" x 1 1/4" SS button head cap screw W/O LOCKING THREAD into the lower hole of the double set of mounting holes WITHOUT a washer. **DO NOT TIGHTEN**. See DETAIL A.
- 3. Slide the three corners of the TRIANGLE PLATFORM S5P 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.

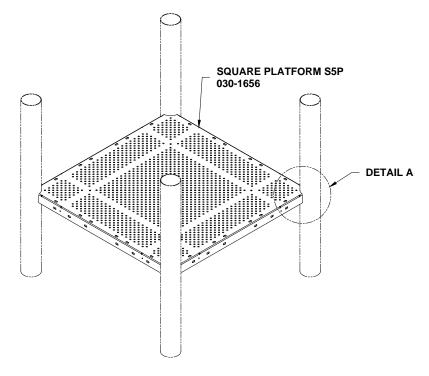
270-0129.doc Description: TRIANGLE PLATFORM

REV: 01 PCN: 13-0089 5/10/2013





### **ELEVATION VIEW**



## 270-0130 SQUARE PLATFORM S5P

# PARTS LIST PART NO. DESCRIPTION QTY 030-1656 SQUARE PLATFORM S5P 1 036-1101 HARDWARE PACKAGE 1

SQUARE PLATFORM S5P: 12 GA HRPO sheet, finished with a PVC Coating

HARDWARE PACKAGE: Stainless steel

**SPECIFICATIONS** 

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

SHIPPING WEIGHT: 106 LBS.

### **INSTALLATION INSTRUCTIONS**

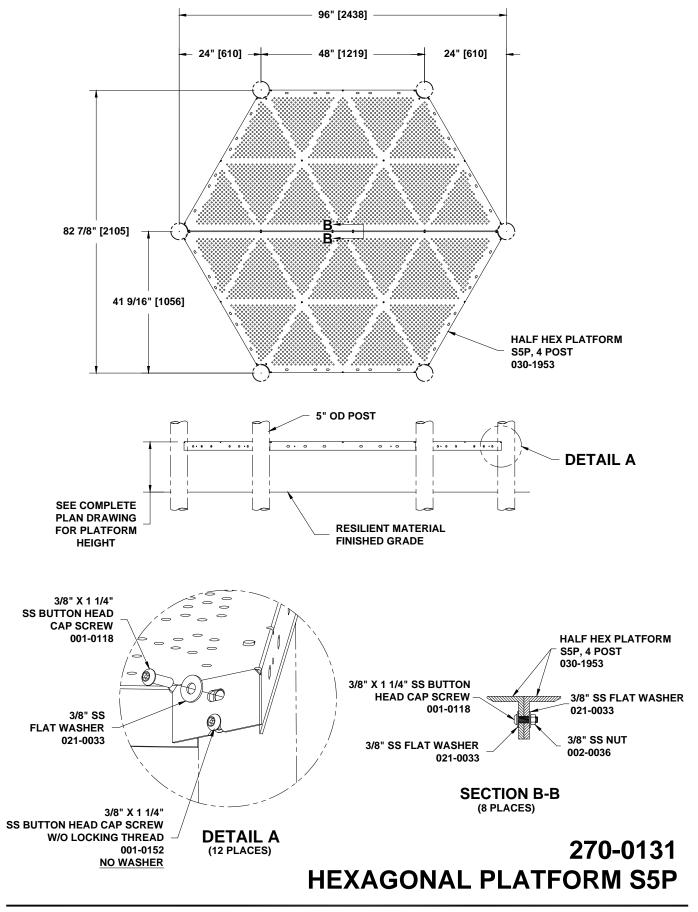
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 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.

270-0130.doc Description: SQUARE PLATFORM

REV: 01 PCN: 13-0089 5/10/2013





# PARTS LIST PART NO. DESCRIPTION QTY 030-1953 HALF HEX 4 POST S5 PLATFORM 2 036-1108 HARDWARE PACKAGE 1

SPECIFICATIONS

OST S5 PLATFORM: One piece platform a

<u>HALF HEX 4 POST S5 PLATFORM</u>: One piece platform all welded construction consisting of 12 GA surfaces, gussets, and corner plates. PVC coated after fabrication.

**HARDWARE PACKAGE: Stainless steel** 

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

SHIPPING WEIGHT: 287 LBS.

### **INSTALLATION INSTRUCTIONS**

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

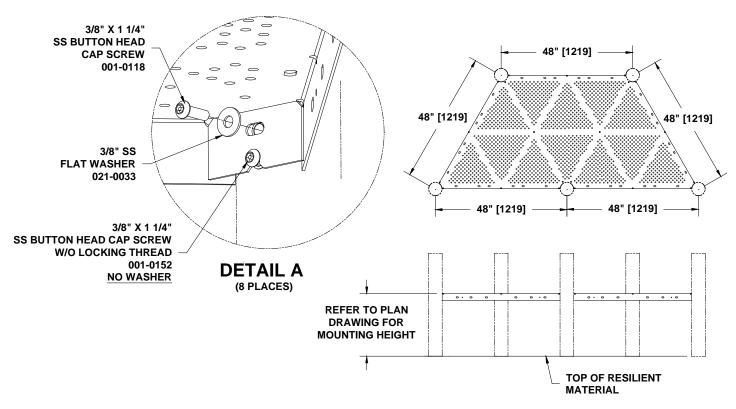
NOTE: Do not tighten hardware until instructed to do so.

- 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 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.

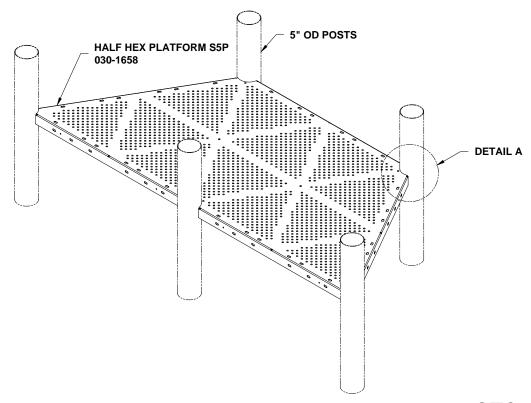
270-0131.doc Description: HEXAGONAL PLATFORM S5P

REV: 01 PCN: 13-0089 5/10/2013





### **ELEVATION VIEW**



## 270-0132 HALF HEXAGON PLATFORM S5P

# PARTS LIST PART NO. DESCRIPTION QTY 030-1658 HALF HEX PLATFORM S5P 1 036-1101 HARDWARE PACKAGE 2

### **SPECIFICATIONS**

HALF HEX PLATFORM S5P: 12 GA HRPO sheet, finished with a PVC Coating

HARDWARE PACKAGE: Stainless steel

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

SHIPPING WEIGHT: 144 LBS.

### **INSTALLATION INSTRUCTIONS**

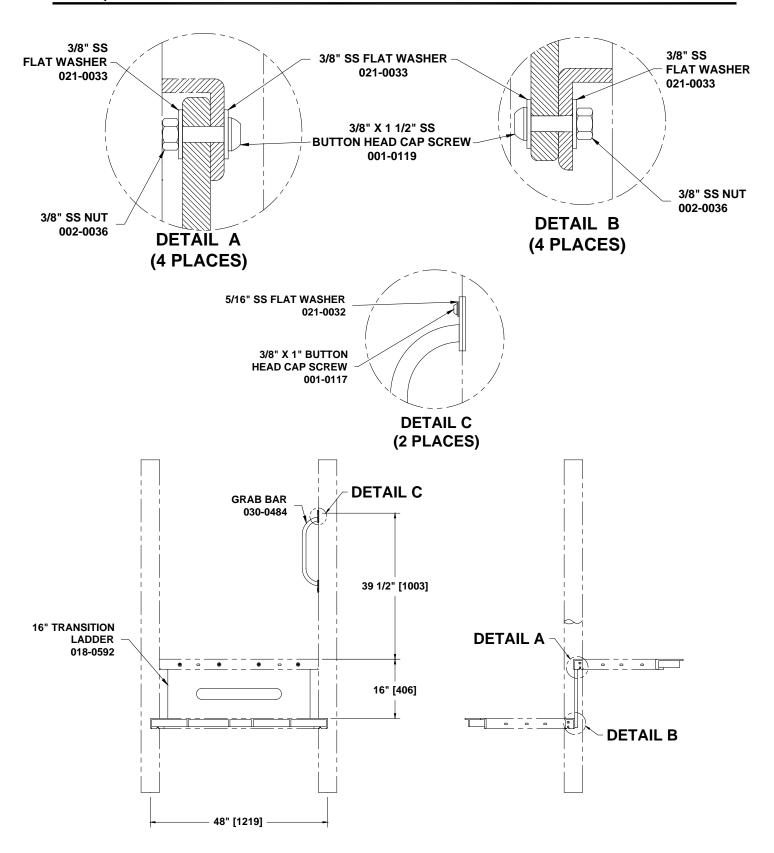
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 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 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





270-0185 16" PLATFORM LADDER

PARISLISI			
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>	
018-0592	16" TRANSITION LADDER	1	
030-0484	GRAB BAR	1	
036-0258	HARDWARE PACKAGE	1	
036-0448	HARDWARE PACKAGE	2	

16" TRANSITION LADDER: 3/4" HDPE

<u>GRAB BAR</u>: 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.

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

SHIPPING WEIGHT: 10 LBS.

### **INSTALLATION INSTRUCTIONS**

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

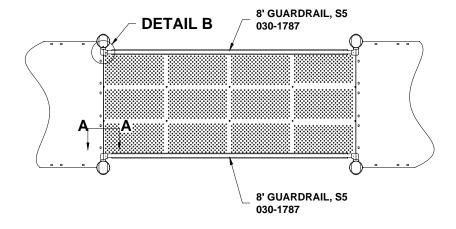
NOTE: Do not tighten hardware until instructed to do so.

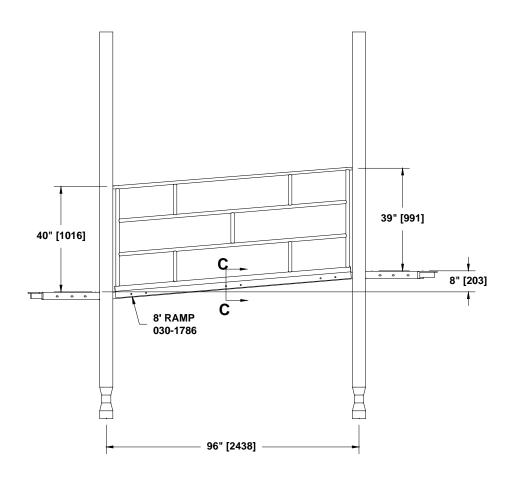
- 1. Attach 16" TRANSITION LADDER to upper and lower platform using 3/8" X 1 1/2" SS button head cap screws, 3/8" SS flat washers and 3/8" SS nuts. See DETAIL A and DETAIL B.
- Attach GRAB BAR using 3/8" X 1" SS button head cap screws and 5/16" SS flat washers.
   See DETAIL C.
- 3. Tighten all hardware.

270-0185.doc Description: PLATFORM LADDER 16"

REV: 01 PCN: 14-0266 10/28/14

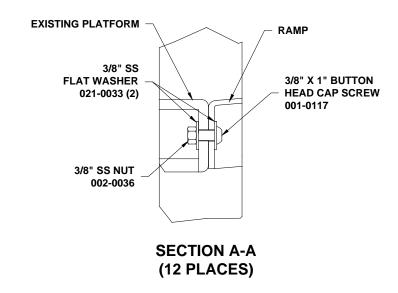


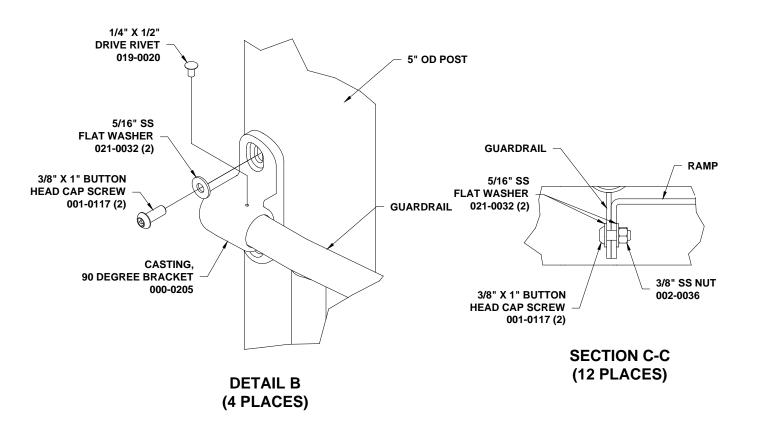




## 270-0221 8" RISE RAMP W/ GUARDRAILS







### 270-0221 8" RISE RAMP W/ GUARDRAILS

PAKISLISI			
PART NO.	<b>DESCRIPTION</b>	QTY	
000-0205	CASTING, 90 DEGREE BRACKET	4	
030-1786	8' RAMP	1	
030-1787	8' GUARDRAIL, S5	2	
036-1114	HARDWARE PACKAGE	1	

<u>CASTING, 90 DEGREE BRACKET</u>: 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.

<u>HARDWARE PACKAGE</u>: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.

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

SHIPPING WEIGHT: 356 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.

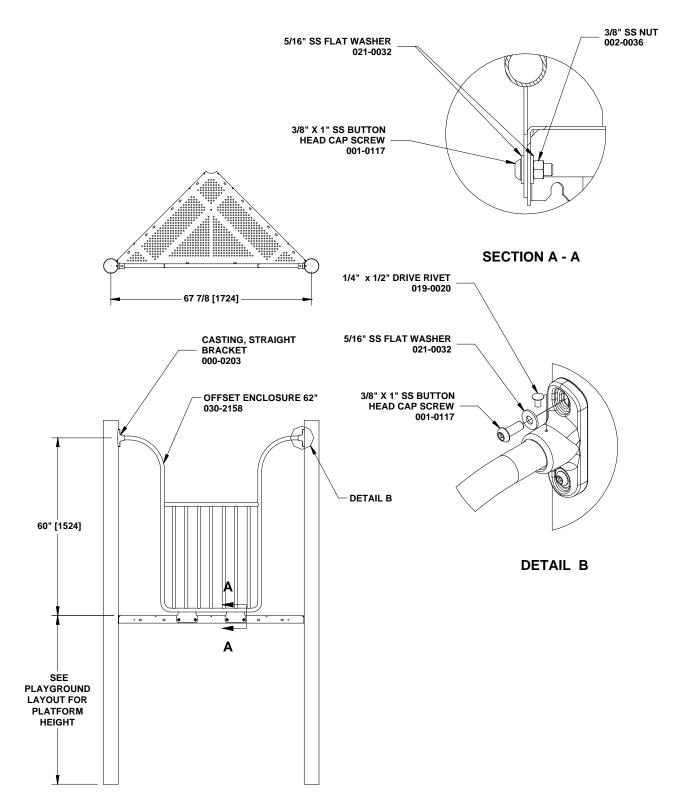
- 1. Determine location of 8" rise ramp.
- 2. Attach 8' RAMP to existing lower and upper platform using 3/8" X 1" SS button head cap screws, 3/8" SS washers and 3/8" SS nuts. See SECTION A-A.
- 3. Attach 8' GUARDRAILS to ramp using 3/8" X 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. 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"

PART NO.	DESCRIPTION	<u>QTY</u>
000-0203	CASTING, STRAIGHT BRACKET	2
030-2158	CENTERED ENCLOSURE 62"	1
036-0258	HARDWARE PACKAGE	4
036-0806	HARDWARE PACKAGE	1
036-0819	HARDWARE PACKAGE	1

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

<u>CENTERED ENCLOSURE 62</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.

HARDWARE PACKAGE; HARDWARE PACKAGE: Stainless

HARDWARE PACKAGE: Aluminum Rivets

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

SHIPPING WEIGHT: 43 LBS.

### **INSTALLATION INSTRUCTIONS**

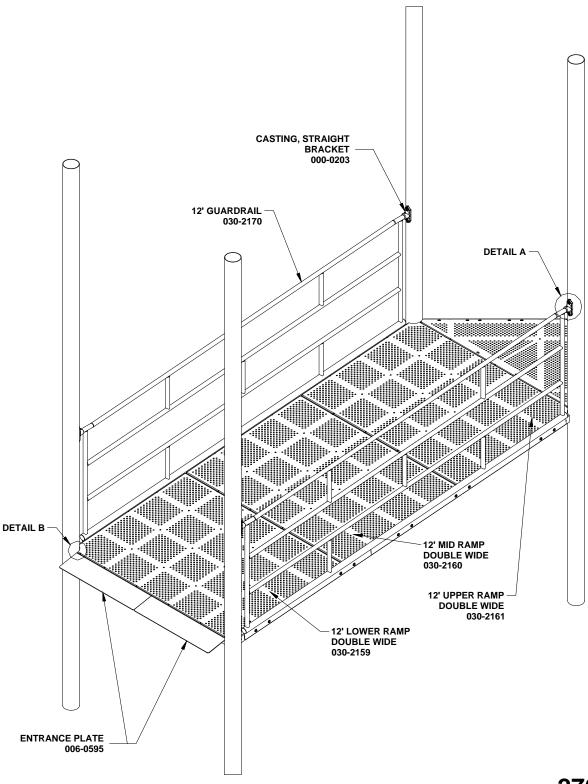
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

- 1. Locate holes for BRACKET CASTINGS on 5" O.D. posts as per dimensions shown.
- 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.

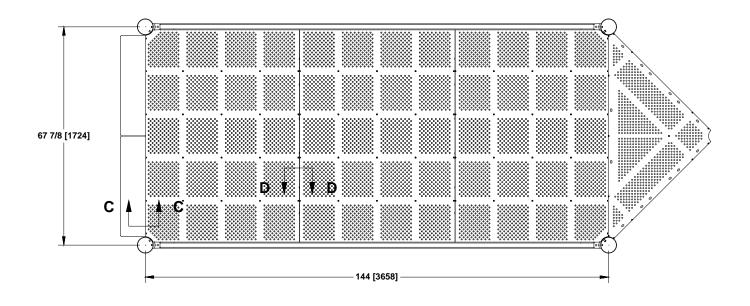
270-0268.doc Description: CENTERED ENCLOSURE 62"

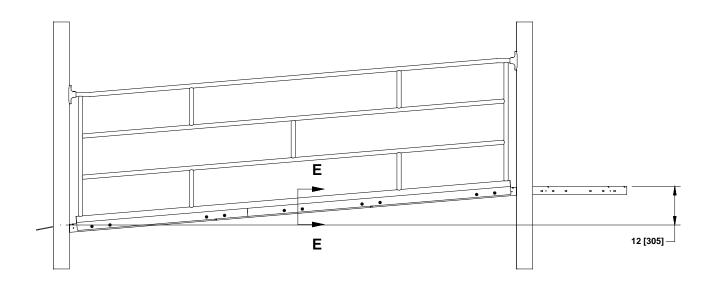
REV: 00 PCN: 12-0092 12/17/2012



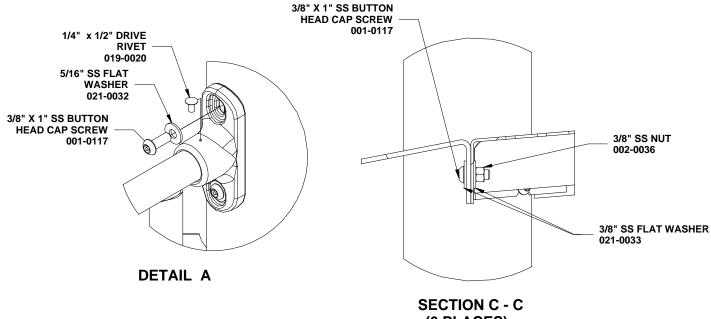


### 270-0272 DBLE WIDE RAMP 12" RISE ENTRANCE W/ GUARDRAIL

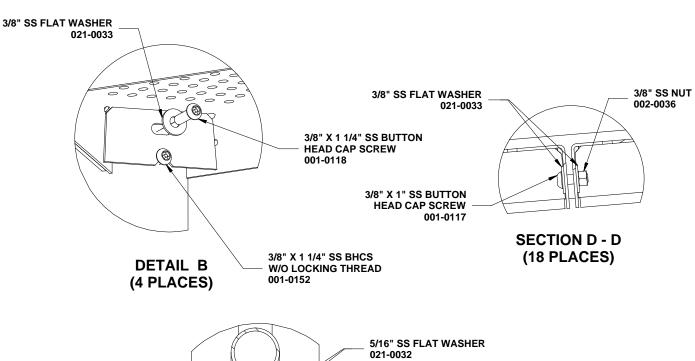


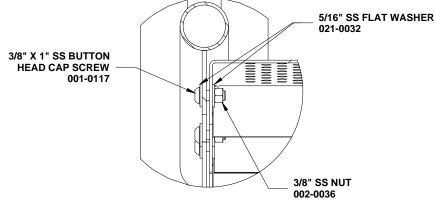


## 270-0272 DBLE WIDE RAMP 12" RISE ENTRANCE W/ GUARDRAIL



(6 PLACES)





**SECTION E - E** (20 PLACES)

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

PARTS LIST ———					
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>			
000-0203	CASTING, STRAIGHT BRACKET	4			
006-0595	ENTRANCE PLATE	2			
030-2159	12' LOWER RAMP DOUBLE WIDE	1			
030-2160	12' MID RAMP DOUBLE WIDE	1			
030-2161	12' UPPER RAMP DOUBLE WIDE	1			
030-2170	12' GUARDRAIL	2			
036-1115	HARDWARE PACKAGE	1			

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

#### **SPECIFICATIONS**

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

ENTRANCE PLATE: 7 GA HR steel. PVC coated after fabrication.

12' LOWER RAMP DOUBLE WIDE; 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.

12' GUARDRAIL: 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.

<u>HARDWARE PACKAGE</u>: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.

SHIPPING WEIGHT: 776 LBS.

#### INSTALLATION INSTRUCTIONS

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

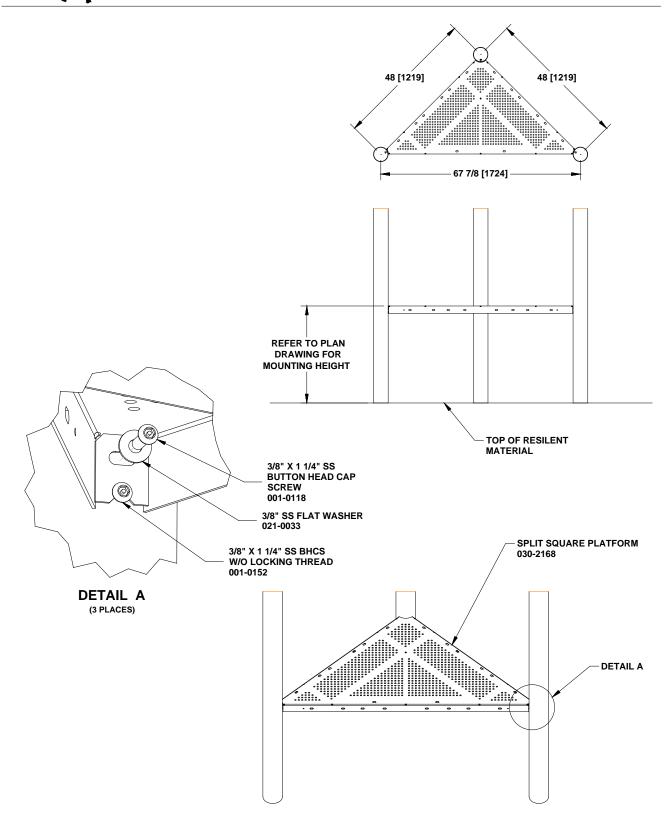
NOTE: Do not tighten hardware until instructed to do so.

- 1. Determine location of 12" rise ramp.
- 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 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.
- 5. 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"

# PARTS LIST PART NO. DESCRIPTION QTY 030-2168 SPLIT SQUARE PLATFORM 1 036-1100 HARDWARE PACKAGE 1

SPECIFICATIONS

SPLIT SQUARE PLATFORM: 12 GA HRPO sheet, finished with a PVC Coating

HARDWARE PACKAGE: Stainless steel

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

SHIPPING WEIGHT: 48 LBS.

#### **INSTALLATION INSTRUCTIONS**

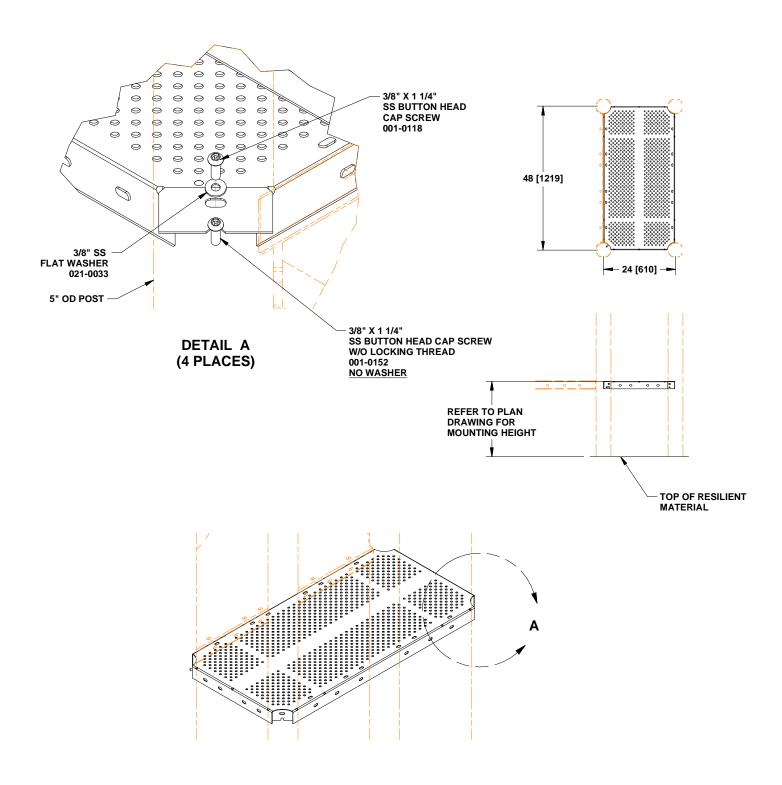
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 1. Locate the double sets of platform mounting holes in each post.
- 2. Partially thread a 3/8" x 1 1/4" SS button head cap screw W/O LOCKING THREAD into the lower hole of the double set of mounting holes WITHOUT a washer. **DO NOT TIGHTEN**. See DETAIL A.
- 3. Slide the three corners of the 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.

270-0278.doc Description: SINGLE SPLIT SQUARE PLATFORM 62"

REV: 01 PCN: 13-0089 5/10/2013





### 270-0290 HALF PLATFORM

PARISLISI —			
PART NO.	DESCRIPTION	QTY	
030-2435	HALF PLATFORM	1	
036-1101	HARDWARE PACKAGE	1	

SPEC	IFICATI	ons =
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HALF PLATFORM: 12 GA HRPO sheet, finished with a PVC Coating

HARDWARE PACKAGE: Stainless steel

HANDWAKE I AOKAGE. Glainless steel

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

SHIPPING WEIGHT: 56.6 LBS.

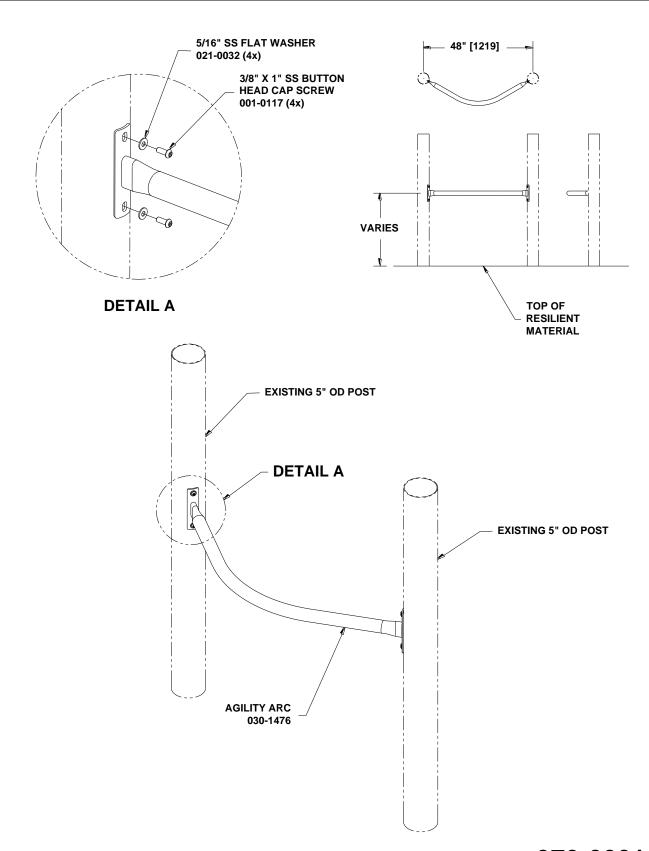
#### **INSTALLATION INSTRUCTIONS**

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.

270-0290 HALF PLATFORM REV: 00 PCN: 14-0110 9/25/2015





## 370-0001 AGILITY ARC

PARTS LIST					
PART NO.	DESCRIPTION	<u>QTY</u>			
030-1476	AGILITY ARC	1			
036-0258	HARDWARE PACKAGE	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.

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

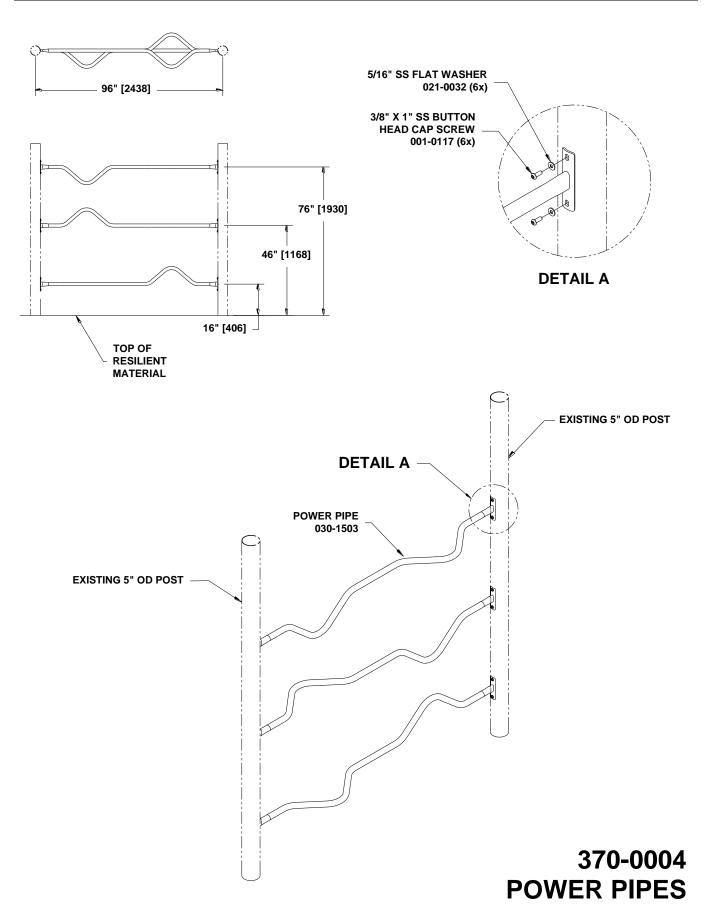
SHIPPING WEIGHT: 12 LBS.

#### **INSTALLATION INSTRUCTIONS**

- 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





PART NO.	PARTS LIST <u>DESCRIPTION</u>	<u>QTY</u>
030-1503 036-0258	POWER PIPE HARDWARE PACKAGE	3 6
	vare package(s) may include extra hardw ecessary for this installation.	are

#### **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.

SHIPPING WEIGHT: 48 LBS.

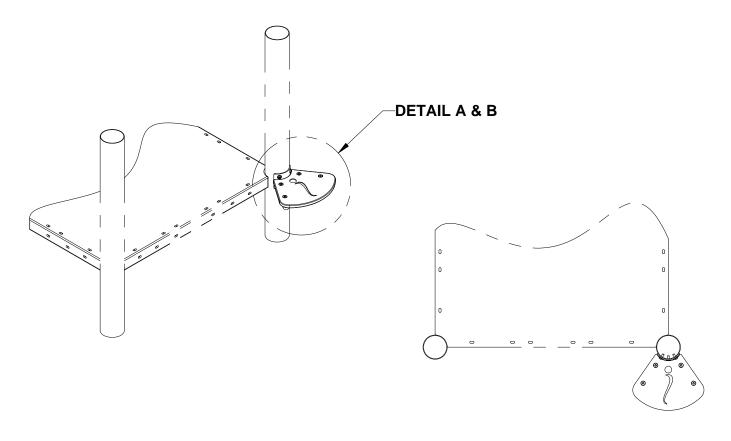
#### **INSTALLATION INSTRUCTIONS**

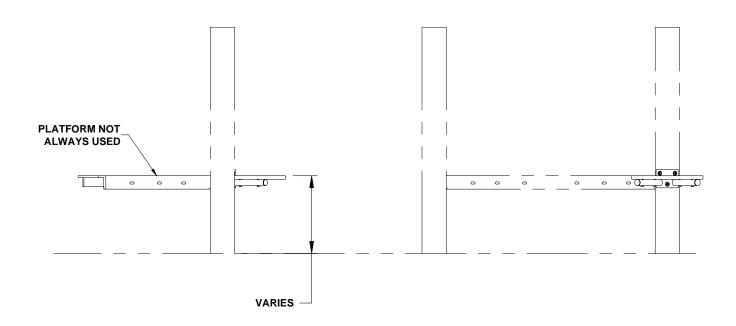
- 1. Attach POWER PIPES to posts using 3/8" x 1" SS button head cap screw and 5/16" SS flat washer. See DETAIL A.
- 2. Tighten all hardware.
- 3. INSTALL RESILIENT SURFACING MATERIAL IN ACCORDANCE TO INSTALLATION GUIDELINES.

370-0004.doc Description: POWER PIPES CLIMBER

REV: 00 PCN: 07-0016 11/15/2007

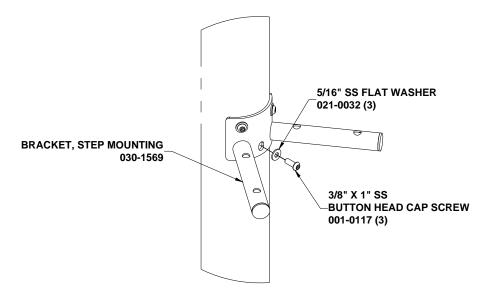




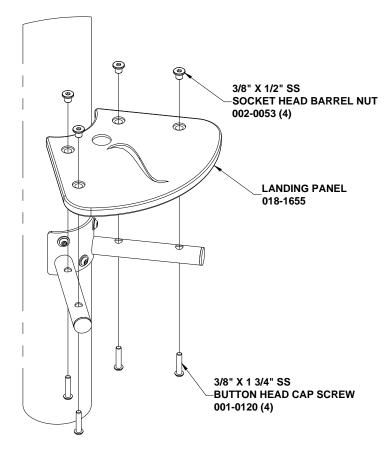


## 370-0027 LAUNCH PAD





**DETAIL A** 



**DETAIL B** 

## **370-0027 LAUNCH PAD**

FARTS LIST				
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>		
018-1655	LANDING PANEL	1		
030-1569	BRACKET, STEP MOUNTING	1		
036-0258	HARDWARE PACKAGE	2		
036-1014	HARDWARE PACKAGE	1		

DADTS I IST

#### **SPECIFICATIONS**

LANDING PANEL: 3/4" co-extruded HDPE.

BRACKET, STEP MOUNTING: One piece all welded construction consisting of 10 GA galvanized sheet steel, 7 GA stainless steel sheet and 1.315" OD x 12 GA galvanized steel tubing. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel.

<u>HARDWARE PACKAGE</u>: Stainless steel button head cap screws, washers, & barrel nuts.

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

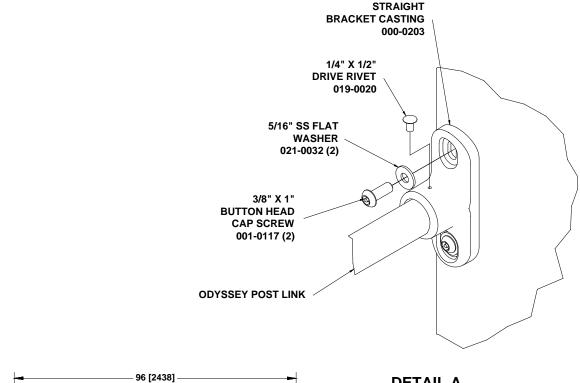
SHIPPING WEIGHT: 10 LBS.

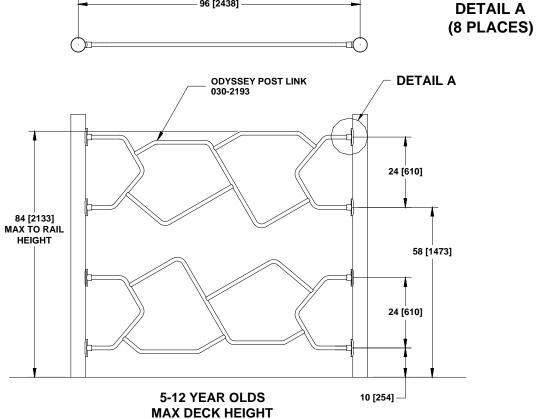
#### **INSTALLATION INSTRUCTIONS**

- 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.

370-0027.doc Description: LAUNCH PAD REV: 00 PCN: 10-0123 10/1/2010







IS 48" [1219]

370-0033 ODYSSEY POST LINK DOUBLE

DESCRIPTION	<u>QTY</u>
CASTING, STRAIGHT BRACKET	8
ODYSSEY POST LINK	2
HARDWARE PACKAGE	8
HARDWARE PACKAGE	4
	DESCRIPTION  CASTING, STRAIGHT BRACKET  ODYSSEY POST LINK  HARDWARE PACKAGE

#### SPECIFICATIONS

<u>CASTING, STRAIGHT BRACKET</u>: 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: Hardware package(s) may include extra hardware that is not necessary for this installation.

SHIPPING WEIGHT: 79 LBS.

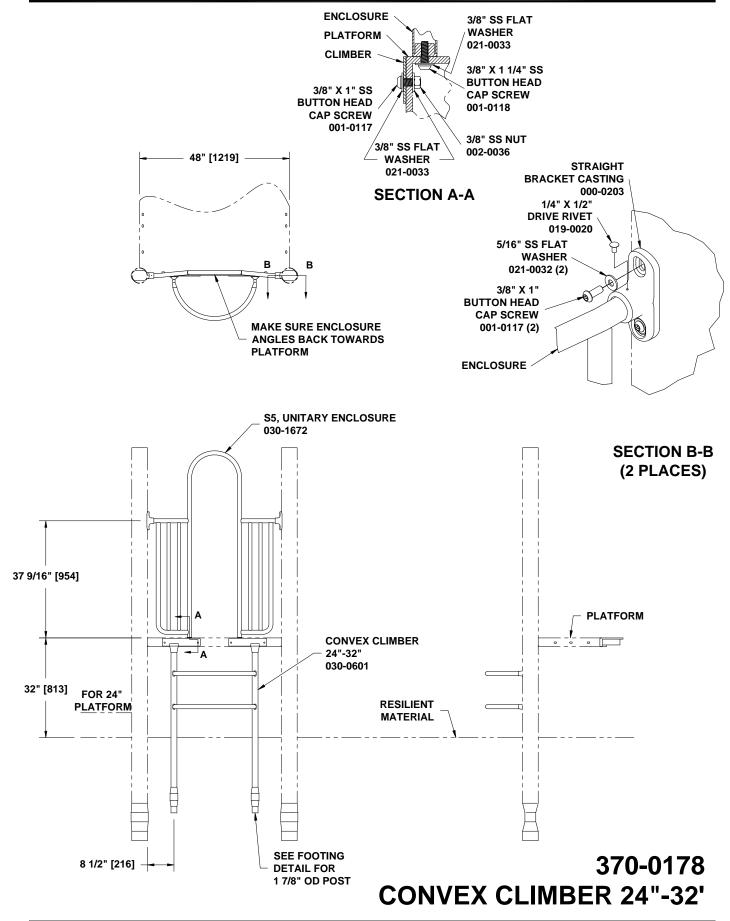
#### **INSTALLATION INSTRUCTIONS**

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

370-0033.doc Description: ODYSSEY POST LINK DOUBLE

REV: 00 PCN: 12-0167 12/3/2012





PARTS LIST —					
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>			
000-0203	CASTING, STRAIGHT BRACKET	2			
030-0601	CONVEX CLIMBER 24"-32"	1			
030-1672	S5 UNITARY ENCLOSURE	1			
036-0018	HARDWARE PACKAGE	1			
036-0819	HARDWARE PACKAGE	1			

Note: Hardware package(s) may include extra hardware

that is not necessary for this installation.

#### **SPECIFICATIONS**

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

CONVEX CLIMBER 24"-32": One piece all welded construction consisting of 1.315" OD x 14 GA & 1.900" OD x 11 GA galvanized steel tubing, and 10 GA galvanized steel plate. Finished with a baked on powder coating.

<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.

HARDWARE PACKAGE: Stainless steel screws, washers and nuts.

HARDWARE PACKAGE: Aluminum Rivets

SHIPPING WEIGHT: 77 LBS.

#### INSTALLATION INSTRUCTIONS

<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)

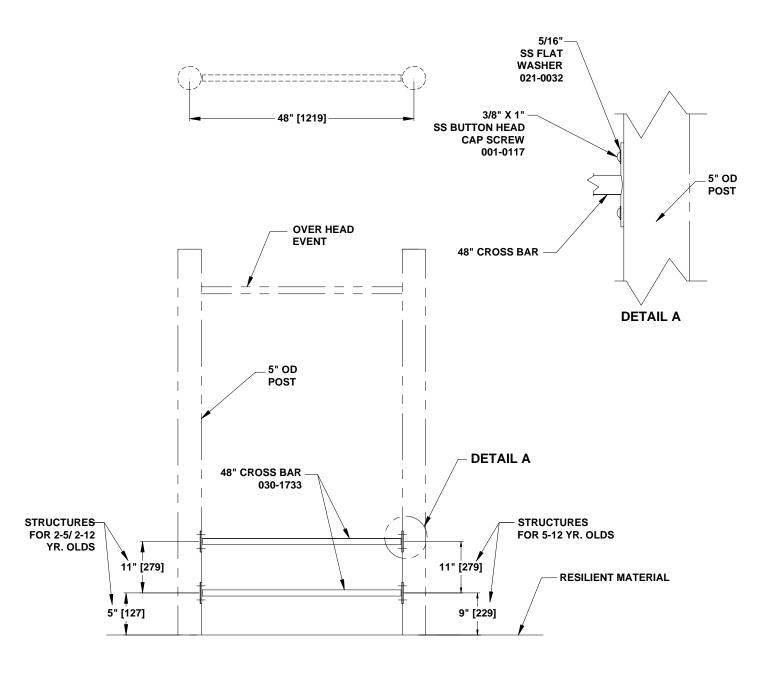
- 1. Locate and dig footing hole as per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Locate mounting holes for UNITARY ENCLOSURE on 5" O.D. posts.
- Set CASTING, S5, STRAIGHT BRACKET onto ends of UNITARY ENCLOSURE. Position 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.
- 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.





## **370-0247 END RUNGS**

PART NO.	PARTS LIST DESCRIPTION	<u>QTY</u>	
030-1733 036-0258		2 4	
Note: Hardware package(s) may include extra hardware that is not necessary for this installation.			

#### **SPECIFICATIONS**

48" CROSS BAR: 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.

HARDWARE PACKAGE: Stainless steel.

SHIPPING WEIGHT: 10 LBS.

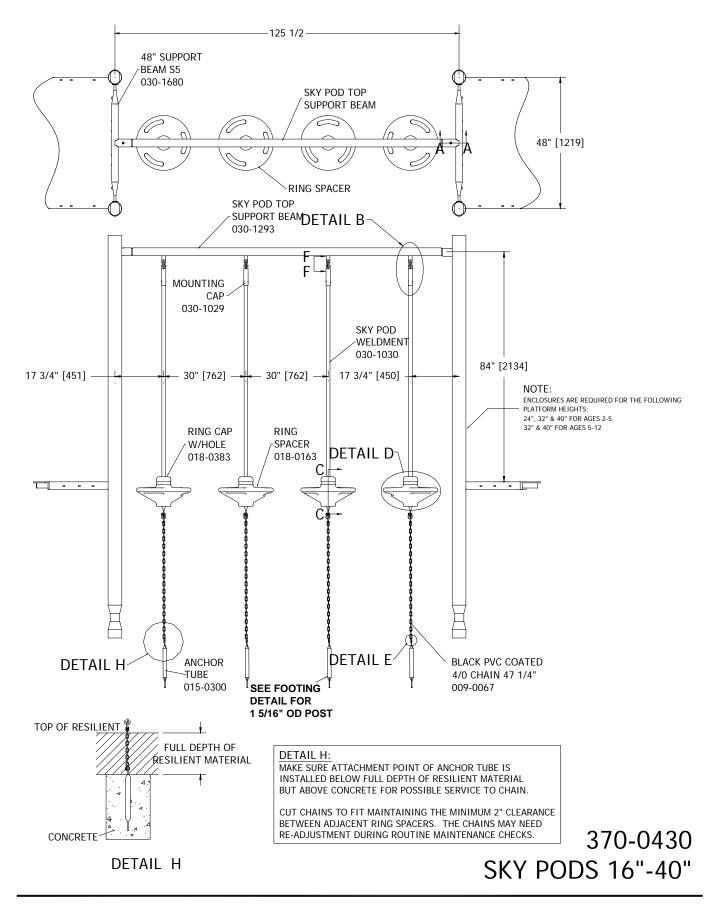
#### **INSTALLATION INSTRUCTIONS**

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.

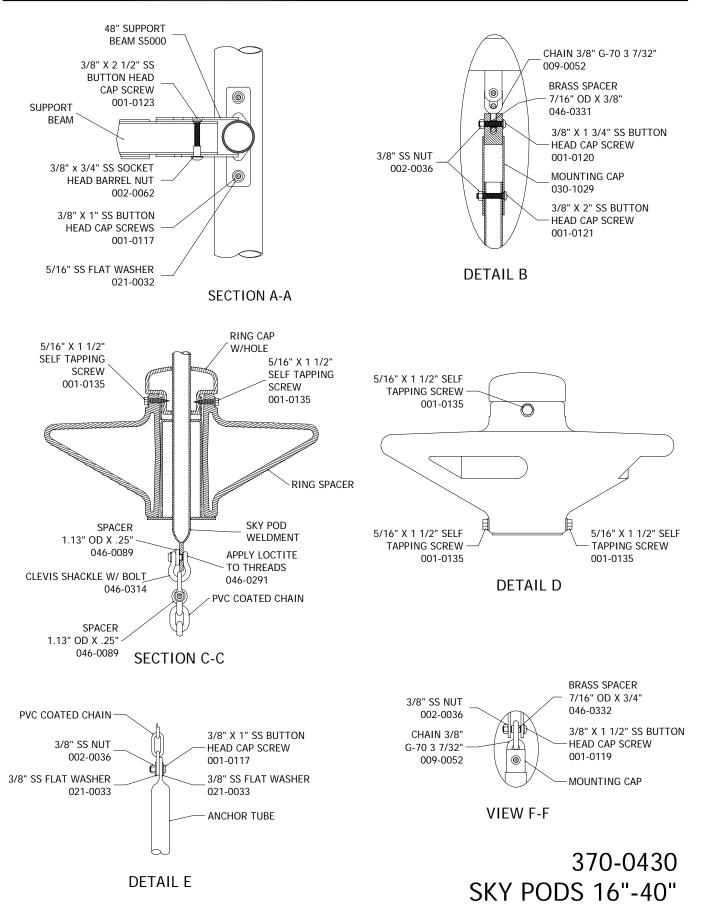
2. Install resilient surfacing material.

370-0247.doc Description: END RUNGS REV: 00 PCN: 09-0014 8/21/2009









PARTS LIST				
PART NO.	DESCRIPTION	<u>QTY</u>		
009-0052	CHAIN 3/8" G-70 3 7/32"	4		
009-0067	BLACK PVC COATED 4/0 CHAIN 47	4		
	1/4"			
015-0300	ANCHOR TUBE	4		
018-0163	RING SPACER	4		
018-0383	RING CAP W/HOLE	4		
030-1029	MOUNTING CAP	4		
030-1030	SKY POD WELDMENT	4		
030-1293	SKY POD TOP SUPPORT BEAM	1		
030-1680	SUPPORT BEAM 5" POSTS	2		
036-0734	HARDWARE PACKAGE	2		
036-0771	HARDWARE PACKAGE	2		
036-0785	HARDWARE PACKAGE	1		
036-0788	HARDWARE PACKAGE	4		
036-0828	HARDWARE PACKAGE	1		
046-0089	SPACER 1.13" OD X .25"	8		
046-0291	LOCTITE	1		
046-0331	BRASS SPACER 7/16" OD X 3/8"	4		
046-0332	BRASS SPACER 7/16" OD X 3/4"	4		

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

#### SPECIFICATIONS

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

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

RING SPACER: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction and a textured surface.

RING CAP W/HOLE: Linear, low density rotationally molded, U.V. stabilized, polyethylene, .250" thick, single wall construction. Textured outside surface.

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.

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 powder coating.

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.

 $\underline{SUPPORT\ BEAM\ 5"\ POSTS}: One\ piece\ all\ welded\ construction\ consisting\ of\ 2\ 3/8"\ OD\ x\ 10\ GA\ \&\ 2\ 7/8"\ OD\ x$  8\ GA\ galvanized\ steel\ tubing,\ and\ formed\ 3/16"\ stainless\ steel\ plates. Finished\ with\ a\ baked\ on\ powder\ coating.

<u>HARDWARE PACKAGE</u>: Stainless steel button head cap screws, nuts and flat washers; zinc plated steel he head cap screws, self tapping screws and lock washers.

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

HARDWARE PACKAGE: Stainless steel screws and washers.

HARDWARE PACKAGE: 5/16" Shackle with a 3/8" X 1 5/32" bolt

HARDWARE PACKAGE: Stainless steel.

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

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

BRASS SPACER 7/16" OD X 3/8"; BRASS SPACER 7/16" OD X 3/4": Brass Tube 7/16" OD X .028" Wall

**SHIPPING WEIGHT: 188 LBS.** 

#### INSTALLATION INSTRUCTIONS

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

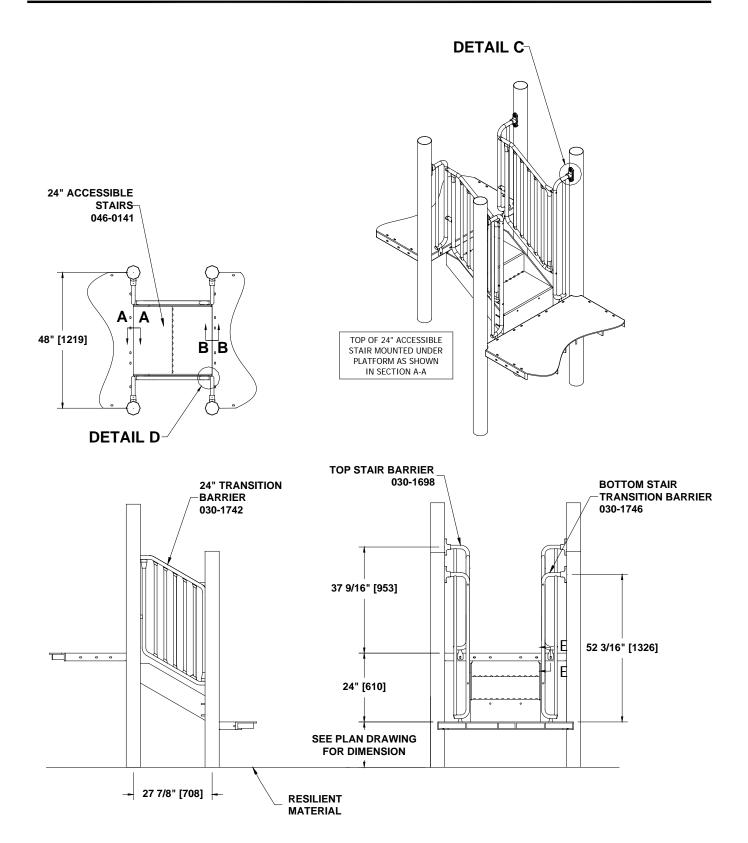
NOTE: Do not tighten hardware until instructed to do so.

- 1. Dig footing holes per dimensions shown. See typical concrete footing details, which are located in the preface of your installation manual.
- 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.
- 3. Insert the SKY POD TOP SUPPORT BEAM into the end of the first support beam. See SECTION A-A.
- 4. 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 button head cap screws and 5/16" SS flat washers. Tighten hardware. See SECTION A-A.
- 5. 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 Nut. Tighten hardware. See SECTION A-A.
- 6. 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 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.
- 9. 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 hardware. See DETAIL B.
- 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.
- 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"

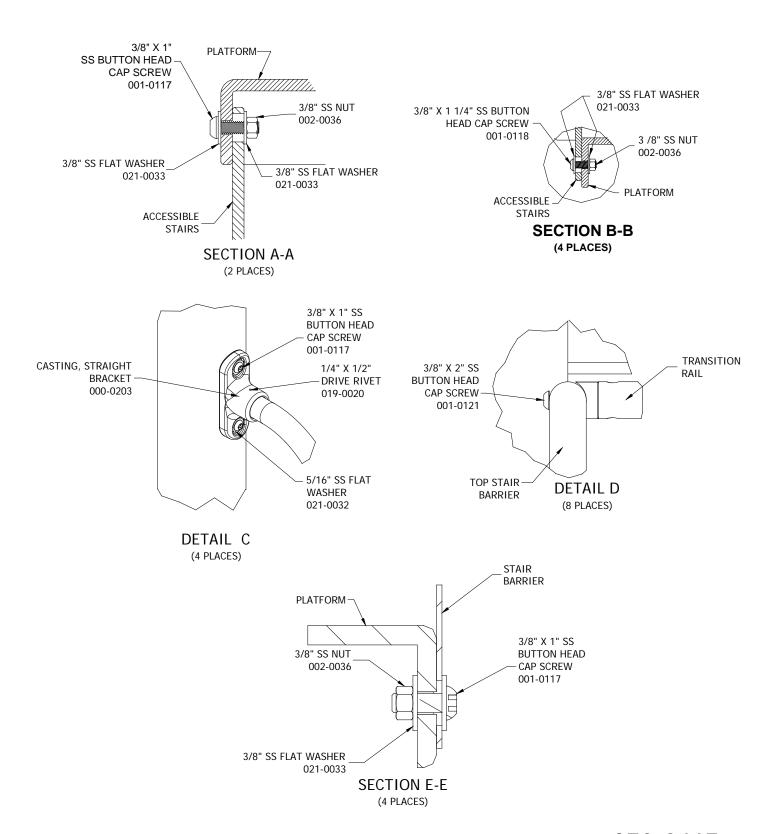
REV: 03 PCN: 13-0251 11/4/2013





370-0467 24" TRANSITION STAIR W/BARRIERS





### 370-0467 24" TRANSITION STAIR W/BARRIERS

	PARTS LIST	
PART NO.	DESCRIPTION	<u>QTY</u>
000-0203	CASTING, STRAIGHT BRACKET	4
030-1698	TOP STAIR BARRIER	2
030-1742	24" TRANSITION BARRIER	2
030-1746	BOTTOM STAIR TRANSITION	2
	BARRIER	
036-1125	HARDWARE PACKAGE	1
046-0141	24" ACCESSIBLE STAIRS	1
I		

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

#### SPECIFICATIONS

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

TOP STAIR 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.

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.

<u>HARDWARE PACKAGE</u>: 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.

**SHIPPING WEIGHT: 161 LBS.** 

#### INSTALLATION INSTRUCTIONS

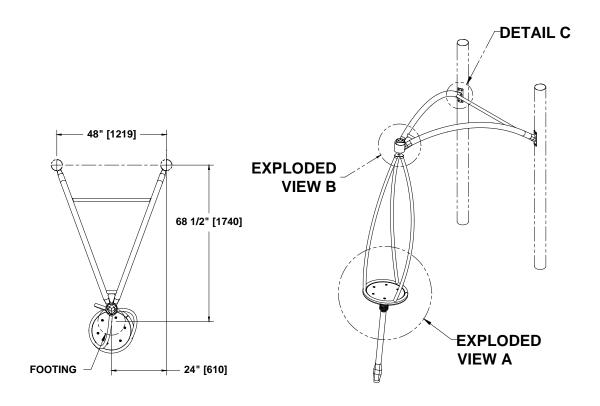
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

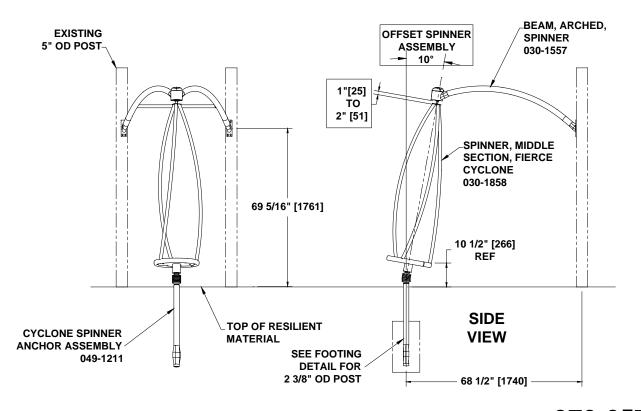
- 1. Install platforms. See appropriate installation instructions.
- 2. Attach 24" ACCESSIBLE STAIRS to upper platform using 3/8" x 1 " SS button head cap screw, 3/8" SS flat washers and 3/8" SS nuts. **NOTE: Make sure the stairs are centered between the posts.** See SECTION A-A.
- 3. Attach 24" accessible 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.
- 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.
- 6. Attach BOTTOM STAIR TRANSITION BARRIER to 24" TRANSITION BARRIER using 3/8" x 2" SS button head cap screws. See DETAIL D
- 7. 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.

370-0467.doc Description: 24" TRANSITION STAIR W/BARRIERS

REV: 01 PCN: 14-0013 2/4/2014

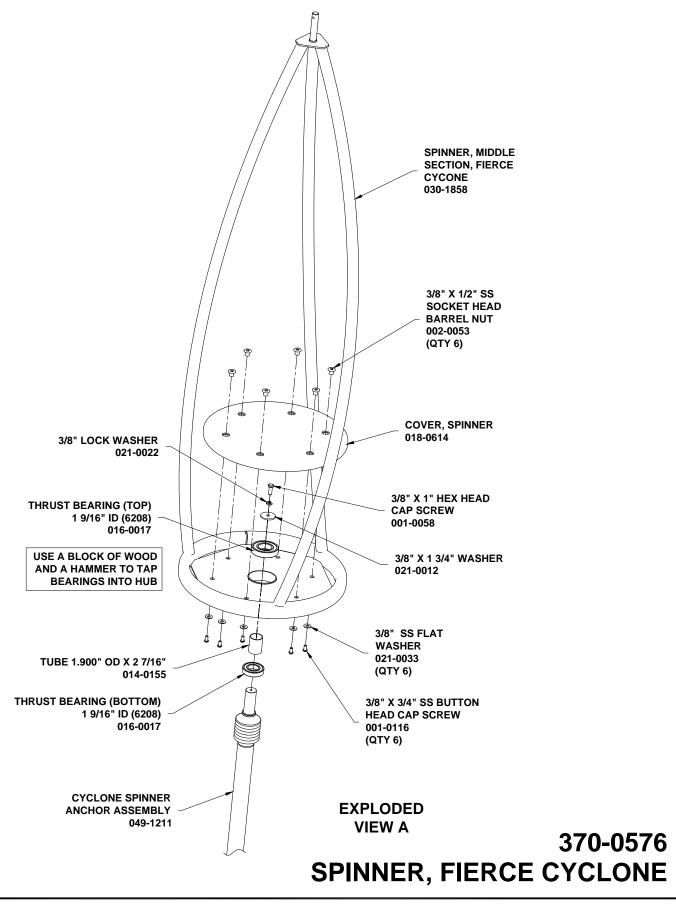




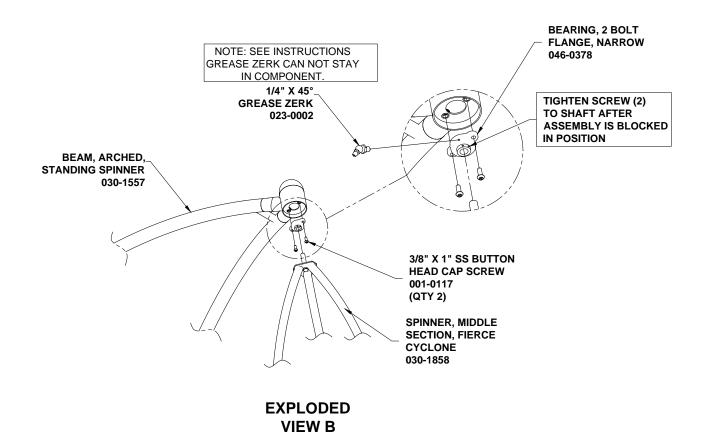


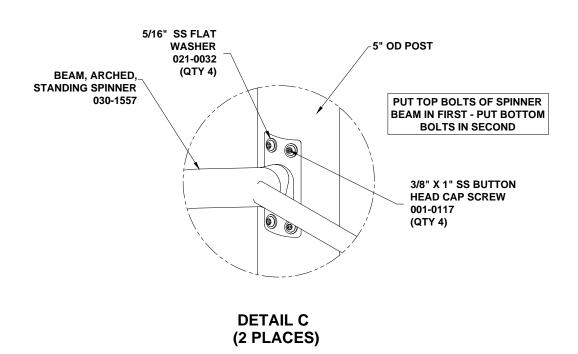
## 370-0576 SPINNER, FIERCE CYCLONE











## 370-0576 SPINNER, FIERCE CYCLONE

PART NO.	PARTS LIST <u>DESCRIPTION</u>	QTY
014-0155	TUBE, 1.900" OD X 11 GA X 2 7/16"	1
016-0017	THRUST BEARING 1 9/16" ID	2
018-0614	COVER, SPINNER	1
023-0002	1/4" X 45° GREASE ZERK	1
030-1557	BEAM, ARCHED, SPINNER	1
030-1858	SPINNER, MIDDLE SECTION,	1
	FIERCE CYCLONE	
036-0258	HARDWARE PACKAGE	5
036-0815	HARDWARE PACKAGE	2
036-1013	HARDWARE PACKAGE	2
046-0378	BEARING, 2 BOLT FLANGE,	1
049-1211	NARROW CYCLONE SPINNER ANCHOR ASSEMBLY	1

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

#### **SPECIFICATIONS**

TUBE, 1.900" OD X 11 GA X 2 7/16": 1.900" OD x 11 GA galvanized steel tube.

THRUST BEARING 1 9/16" ID: Heavy duty, precision thrust, sealed ball bearing.

COVER, SPINNER: 3/4" extruded HDPE

1/4" X 45° GREASE ZERK: Zinc plated steel.

BEAM, ARCHED, SPINNER: One piece all welded construction consisting of 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.

SPINNER, MIDDLE SECTION, FIERCE CYCLONE: One piece all welded 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 steel plate. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel.

HARDWARE PACKAGE: Stainless Steel.

HARDWARE PACKAGE: Stainless steel button head cap screws, washers, & barrel nuts .

<u>BEARING. 2 BOLT FLANGE, NARROW</u>: 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.

SHIPPING WEIGHT: 150 LBS.

#### INSTALLATION INSTRUCTIONS

- 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.
- 3. 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.

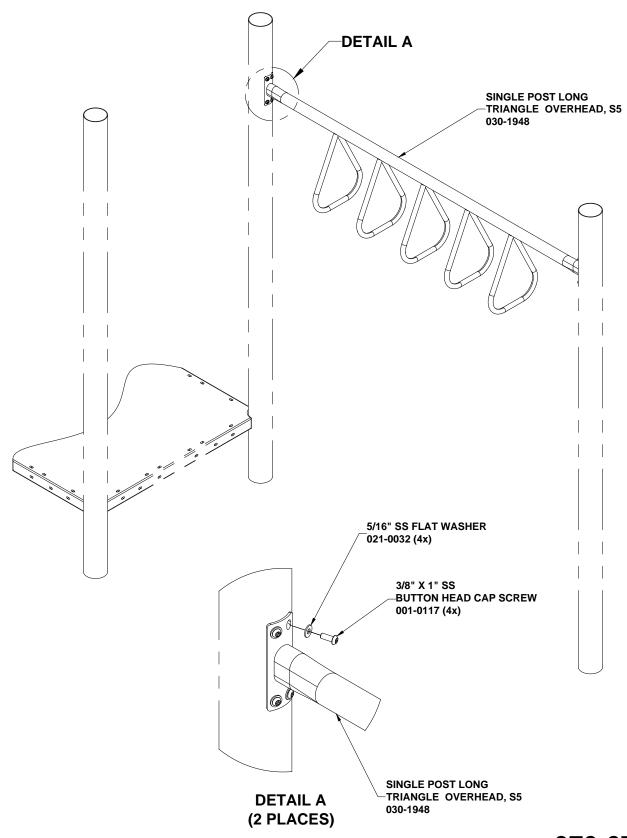
NOTE: Keep grease zerk in a safe place and save for next maintenance period.

- 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.
- 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

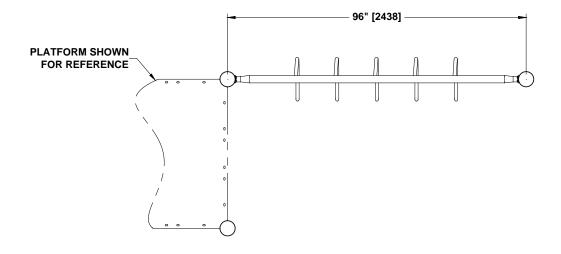
REV: 04 PCN: 16-0288 12/29/2016

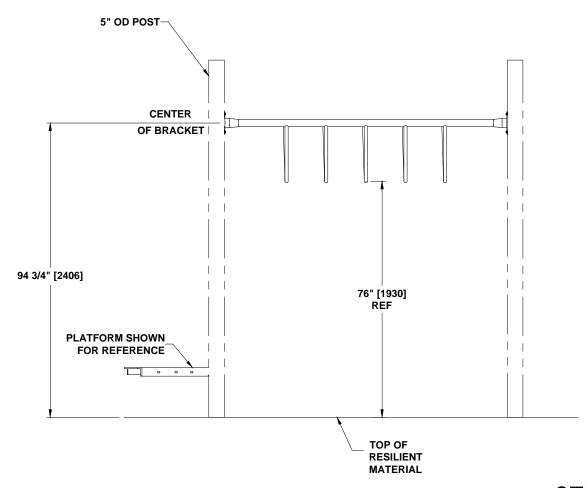




370-0710 TRIANGLE TRAVERSE







## 370-0710 TRIANGLE TRAVERSE

PART NO.	DESCRIPTION	<u>QTY</u>	
030-1948	SINGLE POST LONG TRIANGLE OVERHEAD, S5	1	
036-0258	HARDWARE PACKAGE	4	

DADTS LIST

#### SPECIFICATIONS

SINGLE POST LONG TRIANGLE OVERHEAD, S5: One piece all welded construction consisting of 2.375" x 12 GA, 1.029" OD X 14 GA galvanized steel tubing & 7 GA Stainless Steel Sheet. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel.

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

SHIPPING WEIGHT: 41 LBS.

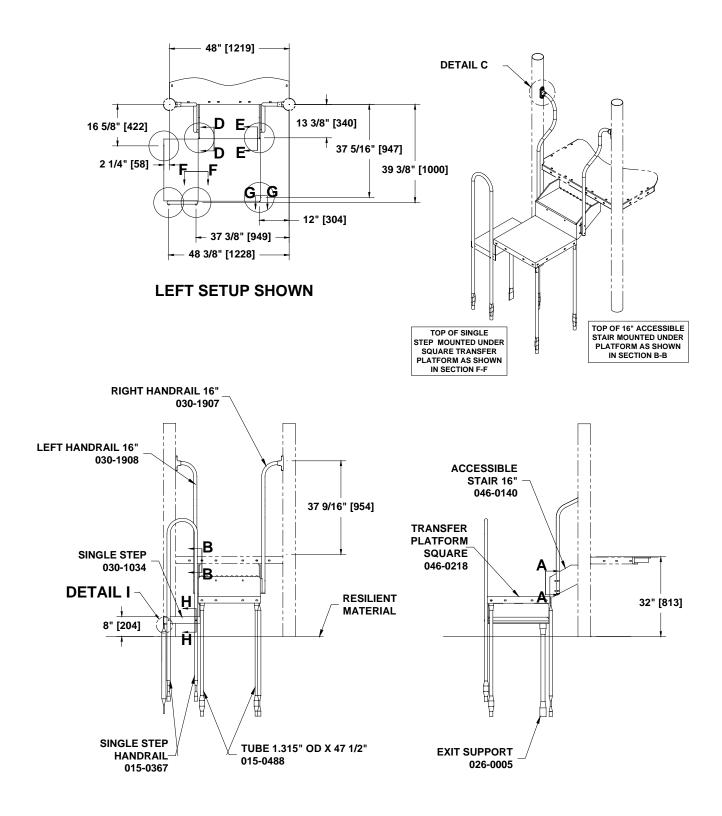
#### **INSTALLATION INSTRUCTIONS**

- 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.

370-0710.doc Description: TRIANGLE TRAVERSE

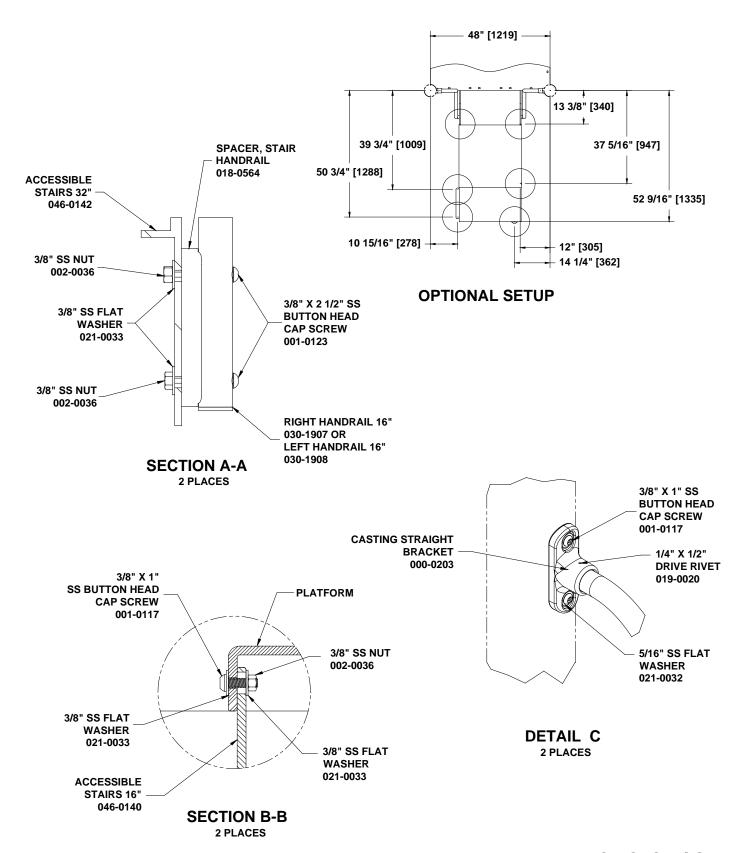
REV: 02 PCN: 17-0009 1/17/2017





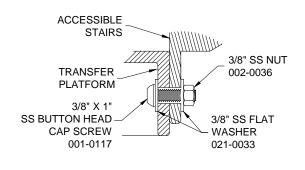
## 370-0718 TRANSFER STATION, HANDRAIL 32"



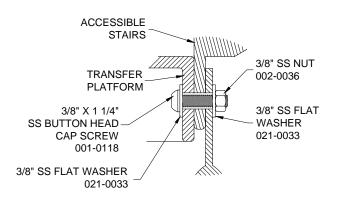


### 370-0718 TRANSFER STATION, HANDRAIL 32"

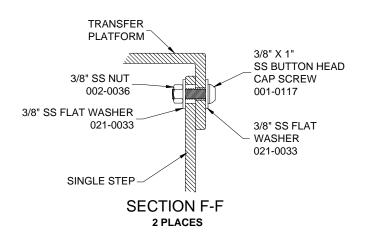


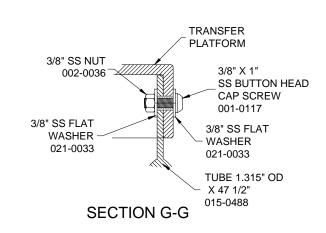


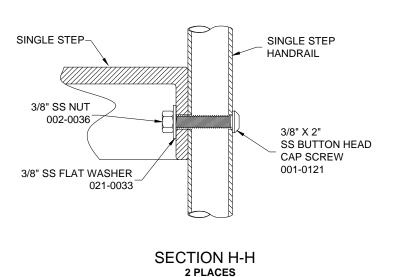
**SECTION D-D** 

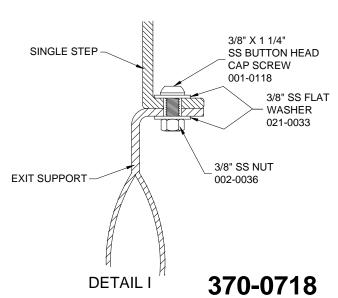


SECTION E-E 2 PLACES









**TRANSFER STATION, HANRAIL 32"** 

		PARTS LIST ———	
	PART NO.	<u>DESCRIPTION</u>	<u>QTY</u>
	000-0203	CASTING, STRAIGHT BRACKET	2
	015-0367	SINGLE STEP HANDRAIL	1
	015-0488	TUBE 1.315" OD X 47 1/2"	3
	018-0564	SPACER, STAIR HANDRAIL	2
	026-0005	SUPPORT, EXIT, 37.29"	1
	030-1034	SINGLE STEP	1
	030-1907	RIGHT HANDRAIL 16"	1
	030-1908	LEFT HANDRAIL 16"	1
	036-1123	HARDWARE PACKAGE	1
	046-0140	16" ACCESSIBLE STAIRS	1
	046-0218	SQUARE TRANSFER PLATFORM	1
ı			

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

#### SPECIFICATIONS

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

SINGLE STEP HANDRAIL: Formed 1.315" OD x 12 GA galvanized steel tubing finished with a baked on powder coating.

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

SPACER, STAIR HANDRAIL: 3/4" extruded HDPE.

<u>SUPPORT, EXIT, 37.29</u>": 1.660" OD x 13 GA galvanized steel tubing finished with a baked on powder coating.

<u>SINGLE STEP</u>: One piece all welded construction consisting of 12 GA surfaces and gussets. PVC coated after fabrication.

RIGHT HANDRAIL 16"; LEFT HANDRAIL 16": Formed 1.315" OD x 12 GA galvanized steel tubing finished with a baked on powder coating.

<u>HARDWARE PACKAGE</u>: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.

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

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

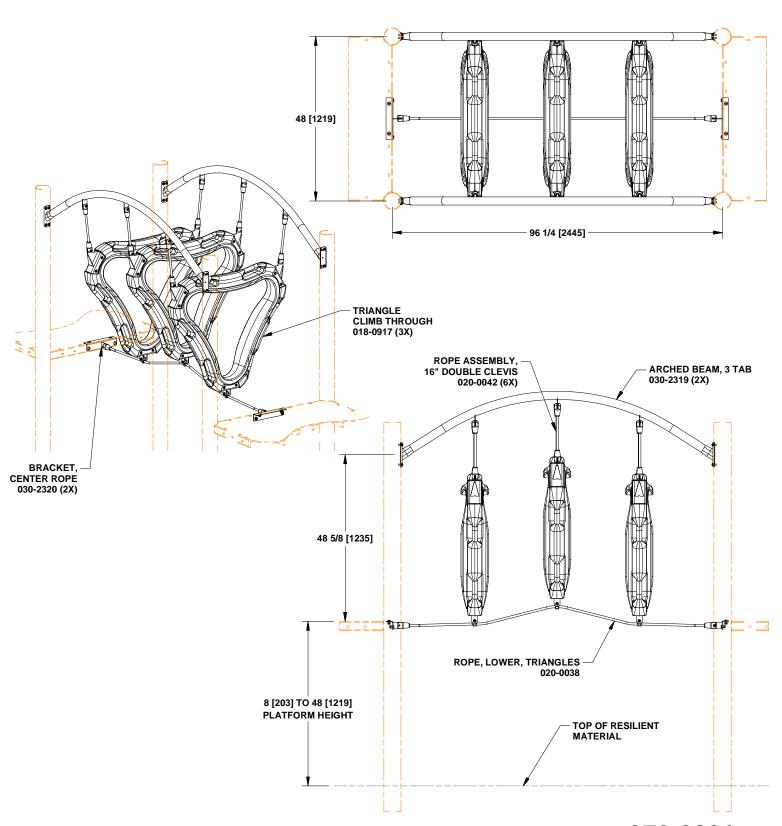
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 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.
- 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.
- 6. 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.
- 7. 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 C.
- 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.

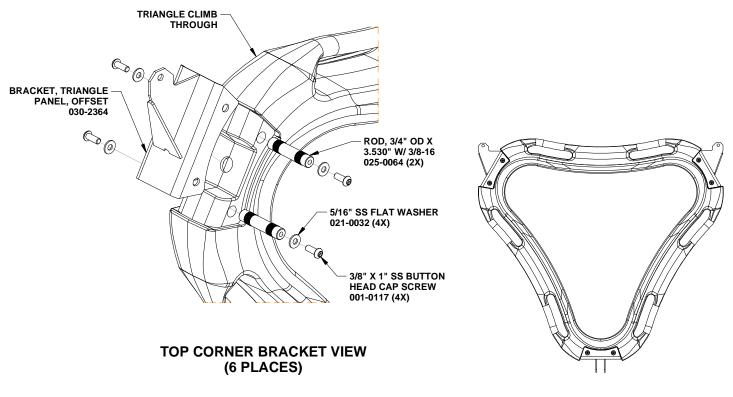
370-0718.doc Description: TRANSFER STATION, HANDRAIL 32"

REV: 02 PCN: 14-0013 2/4/2014

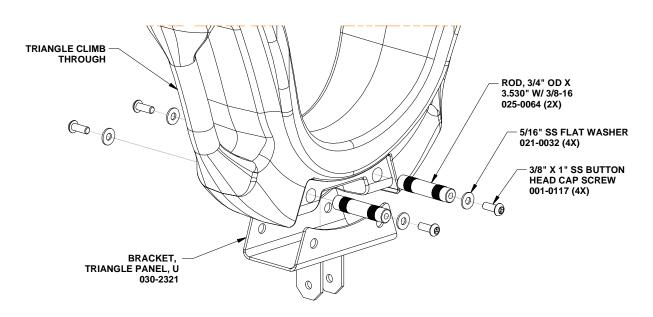






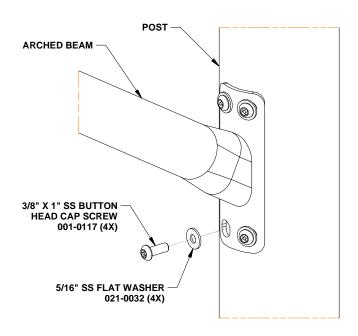


TRIANGLE BRACKET VIEW

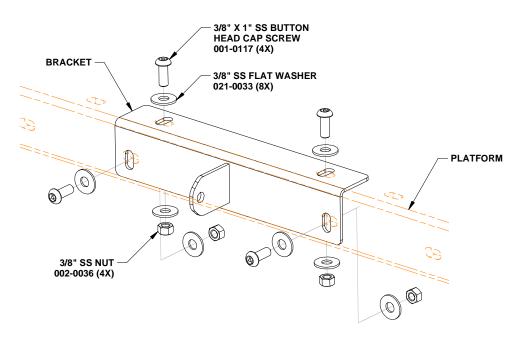


BOTTOM CORNER BRACKET VIEW (3 PLACES)



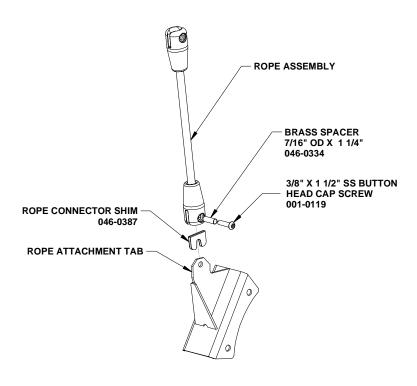


ARCH TO POST VIEW (4 PLACES)

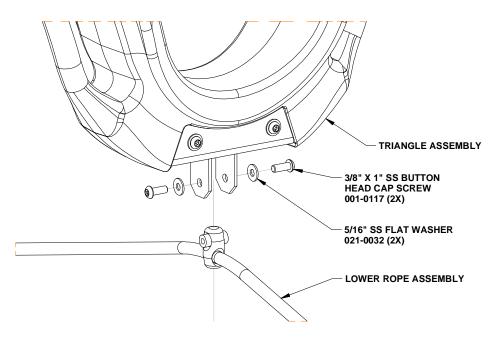


PLATFORM BRACKET VIEW (2 PLACES)





### ROPE CONNECTION VIEW (14 PLACES)



LOWER ROPE CONNECTION VIEW (3 PLACES)

	PARTS LIST	
PART N	O. DESCRIPTION	<u>YTÇ</u>
018-0917	TRIANGLE CLIMB THROUGH	3
020-0038	ROPE, LOWER, TRIANGLES	1
020-0042	ROPE ASSEMBLY, 16" DOUBLE CLEVIS	6
025-0064	ROD, 3/4" OD X 3.530" W/ 3/8-16	18
	ARCHED BEAM, 3 TAB	2
030-2320	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

**NOTE:** 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.

ROPE, LOWER, TRIANGLES: 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.

ROPE ASSEMBLY, 16" DOUBLE CLEVIS: 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 PANEL, OFFSET: 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.

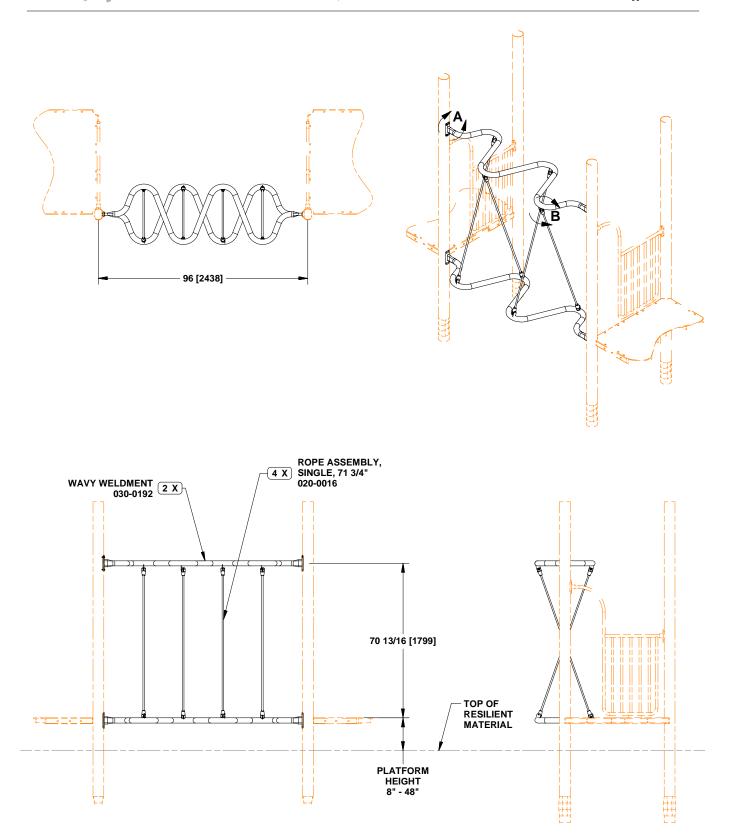
#### **INSTALLATION INSTRUCTIONS**

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.
- 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
- 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.

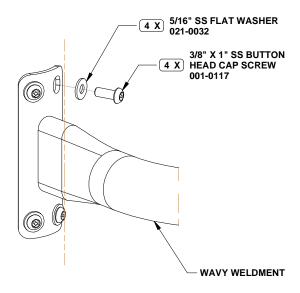
370-0801 TRIGON ARCH LINK, 8"-48" REV: 02 PCN: 14-0238 9/11/2015



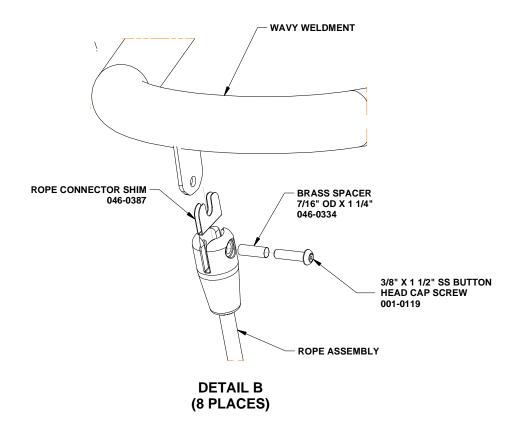


### 370-0808 TWISTING TRAVERSE





DETAIL A (4 PLACES)



### 370-0808 TWISTING TRAVERSE

	PARISLISI	
PART NO.	DESCRIPTION	QTY
020-0016	ROPE ASSEMBLY, SINGLE, 71 3/4"	4
030-0192	WAVY WELDMENT	2
036-0818	INTENSITY SHIM PACKAGE	2
036-1311	HARDWARE PACKAGE	3
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	8

#### **SPECIFICATIONS**

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.

 $\frac{\text{WAVY WELDMENT:}}{12\text{ GA galvanized steel tubing, 7 GA stainless steel sheet \& 8 GA galanized steel sheet. Finished with a baked on powder coating.}$ 

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

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

SHIPPING WEIGHT: 103 LBS.

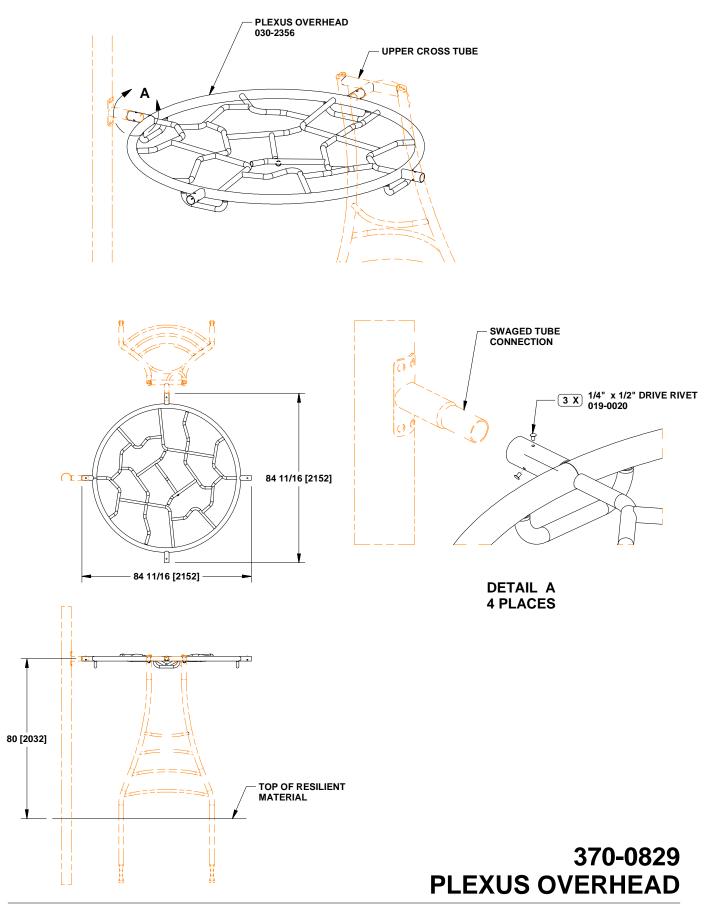
#### **INSTALLATION INSTRUCTIONS**

NOTE: Do not tighten hardware until instructed 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.

370-0808 TWISTING TRAVERSE REV: 00 PCN: 14-0053 6/6/2014





PART NO.	DESCRIPTION	QTY
030-2356	PLEXUS OVERHEAD	1
036-1184	HARDWARE PACKAGE	3

#### **SPECIFICATIONS**

PLEXUS OVERHEAD: One piece all welded construction consisting of

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.

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

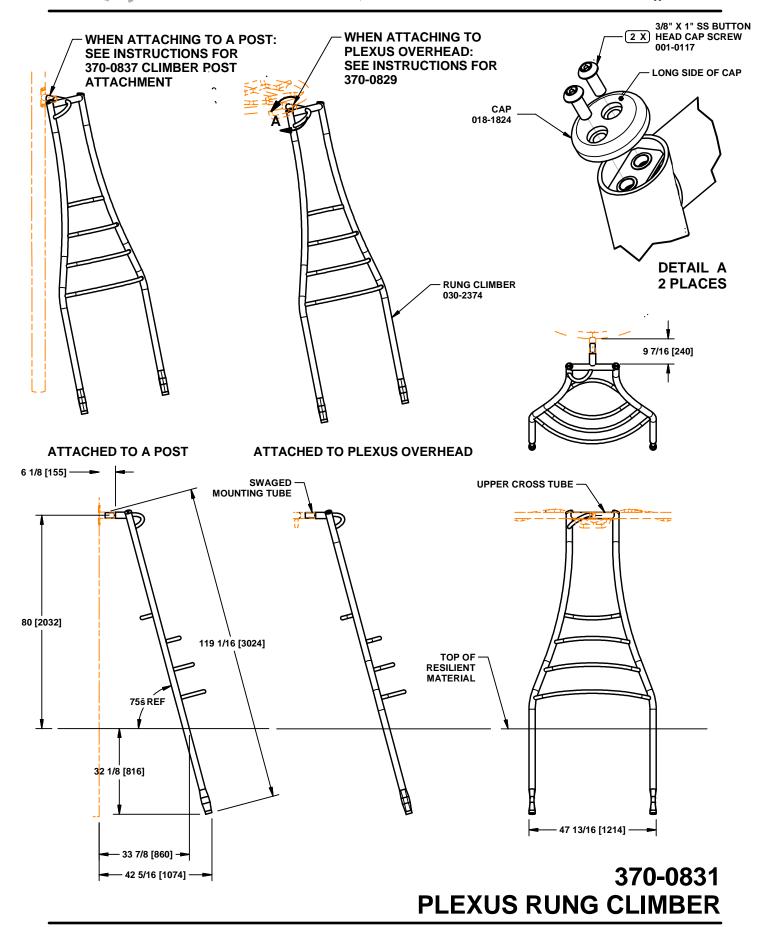
SHIPPING WEIGHT: 96 LBS.

#### **INSTALLATION INSTRUCTIONS**

- 1. Determine location of Plexus Overhead and four attached components from site plan.
- 2. 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.

370-0829 PLEXUS OVERHEAD REV: 00 PCN: 14-0093 12/23/2014





PART NO.	DESCRIPTION	<u>QTY</u>
018-1824	CAP	2
030-2374	RUNG CLIMBER	1
036-0258	HARDWARE PACKAGE	2

#### **SPECIFICATIONS**

CAP: 3/4" Extruded HDPE

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

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

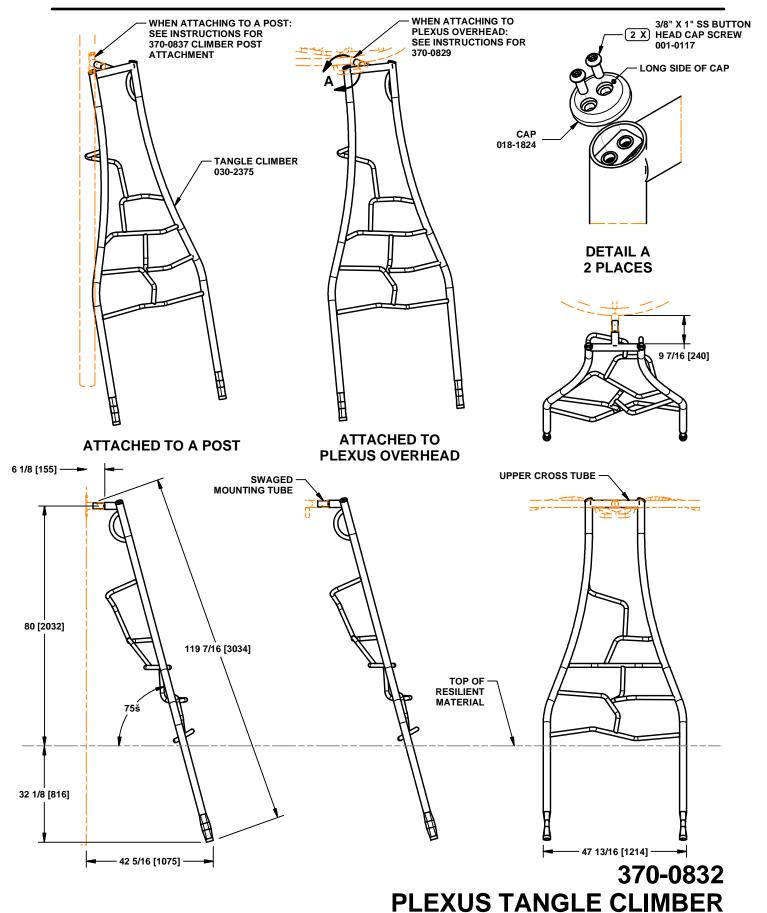
SHIPPING WEIGHT: 83 LBS.

#### **INSTALLATION INSTRUCTIONS**

- 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.

370-0831 PLEXUS RUNG CLIMBER REV: 01 PCN: 17-0009 1/18/2017





PART NO.	DESCRIPTION	<u>QTY</u>
018-1824	CAP	2
030-2375	TANGLE CLIMBER	1
036-0258	HARDWARE PACKAGE	2

#### **SPECIFICATIONS**

CAP: 3/4" Extruded HDPE

TANGLE 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

<u>NOTE:</u> Hardware package(s) may include extra hardware that is not necessary for this installation.

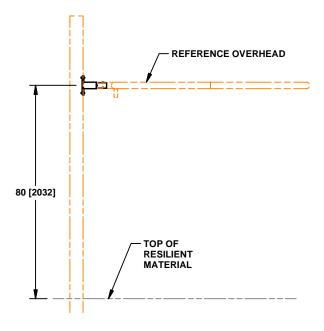
SHIPPING WEIGHT: 89 LBS.

#### **INSTALLATION INSTRUCTIONS**

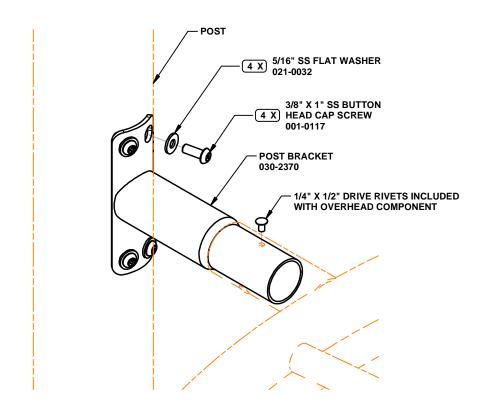
- 1. Determine location of climber from site plan and dig footing holes accordingly. See typical concrete footing details, which are located in the preface of your installation manual.
- 2. Attach CAP(s) to TANGLE CLIMBER with hardware specified in DETAIL A. Make sure the long side of the cap is oriented 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.

370-0832 PLEXUS TANGLE CLIMBER REV: 01 PCN: 17-0009 1/19/2017





**ELEVATION VIEW** 



**ASSEMBLY VIEW** 

### 370-0834 OVERHEAD POST ATTACHMENT

PART NO.	DESCRIPTION	<u>QTY</u>
030-2370	POST BRACKET	1
036-0258	HARDWARE PACKAGE	2

## ACKET: One piece all welded construction consisting

<u>POST BRACKET:</u> 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.

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

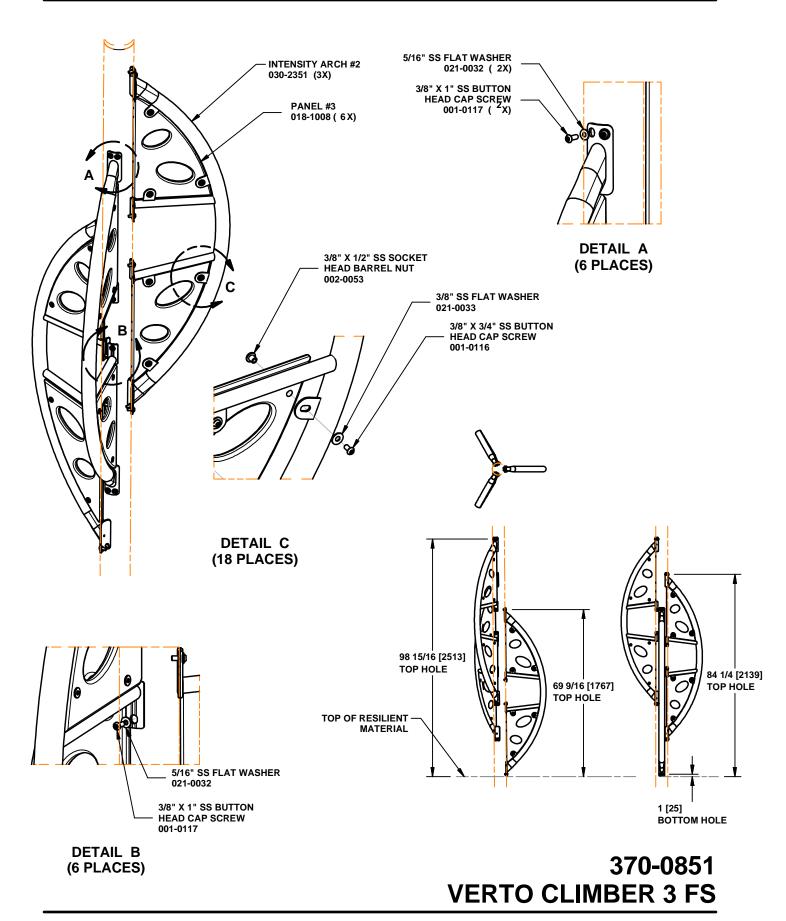
SHIPPING WEIGHT: 3 LBS.

#### **INSTALLATION INSTRUCTIONS**

- 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.

370-0834 OVERHEAD POST ATTACHMENT REV: 01 PCN: 17-0009 1/19/2017





	IANIOLIOI	
PART NO.	DESCRIPTION	<u>QTY</u>
018-1008	PANEL #3	6
030-2351	INTENSITY ARCH #2	3
036-0258	HARDWARE PACKAGE	3
036-1416	HARDWARE PACKAGE	3

#### **SPECIFICATIONS**

PANEL #3: 3/4" extruded HDPE.

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.

<u>NOTE:</u> Hardware package(s) may include extra hardware that is not necessary for this installation.

SHIPPING WEIGHT: 103 LBS.

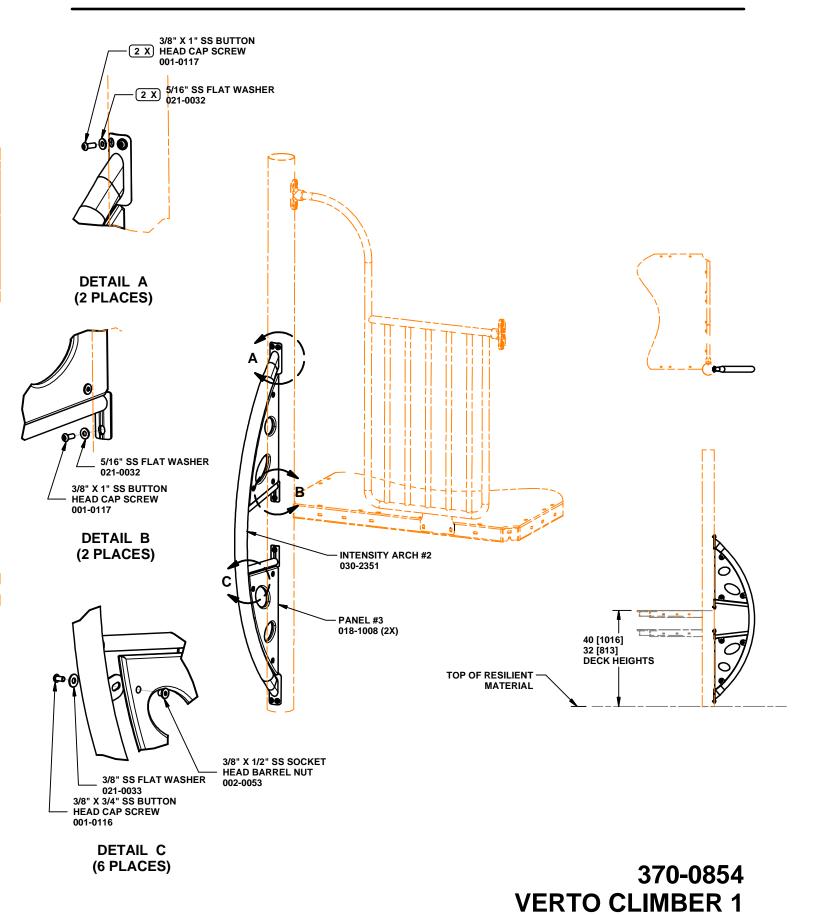
#### **INSTALLATION INSTRUCTIONS**

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.

370-0851 VERTO CLIMBER 3 FS REV: 01 PCN: 17-0009 1/19/2017





PARTS LIST			
PART NO.	DESCRIPTION	<u>QTY</u>	
018-1008	PANEL #3	2	
030-2351	INTENSITY ARCH #2	1	
036-0258	HARDWARE PACKAGE	1	
036-1416	HARDWARE PACKAGE	1	

#### **SPECIFICATIONS**

PANEL #3: 3/4" extruded HDPE.

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.

<u>NOTE:</u> Hardware package(s) may include extra hardware that is not necessary for this installation.

SHIPPING WEIGHT: 35 LBS.

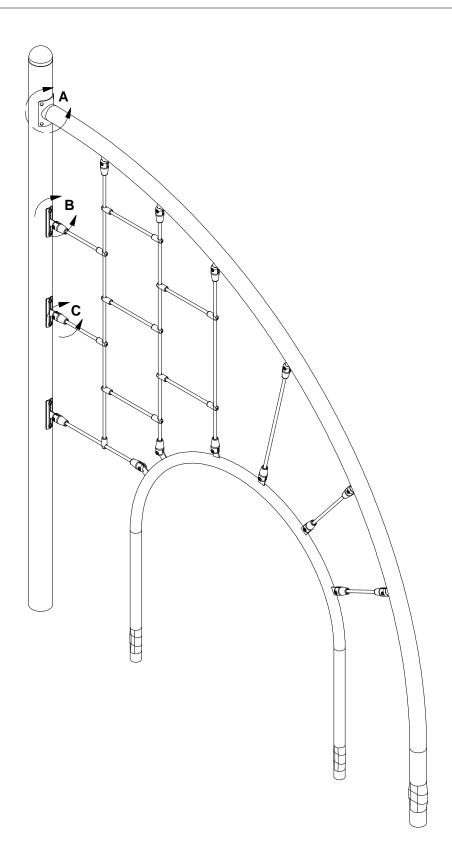
#### **INSTALLATION INSTRUCTIONS**

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.

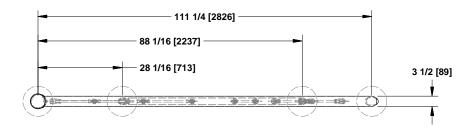
370-0854 VERTO CLIMBER 1 REV: 01 PCN: 17-0009 1/20/2017

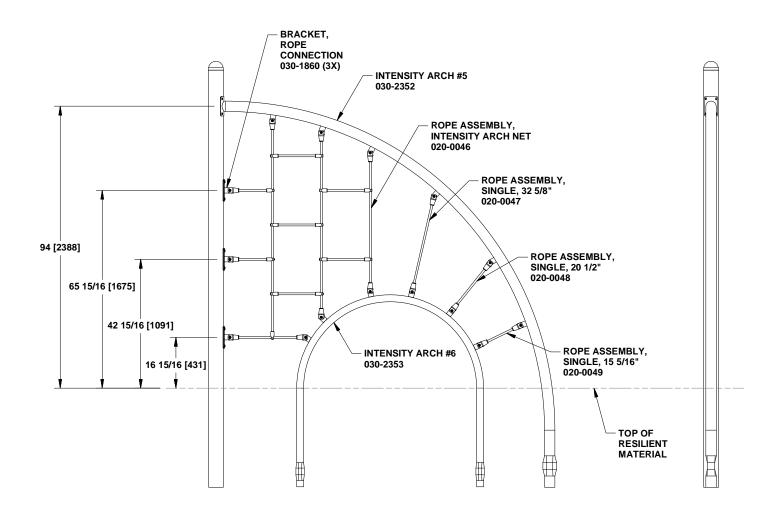




### 370-1583 APEX ROPE CLIMBER

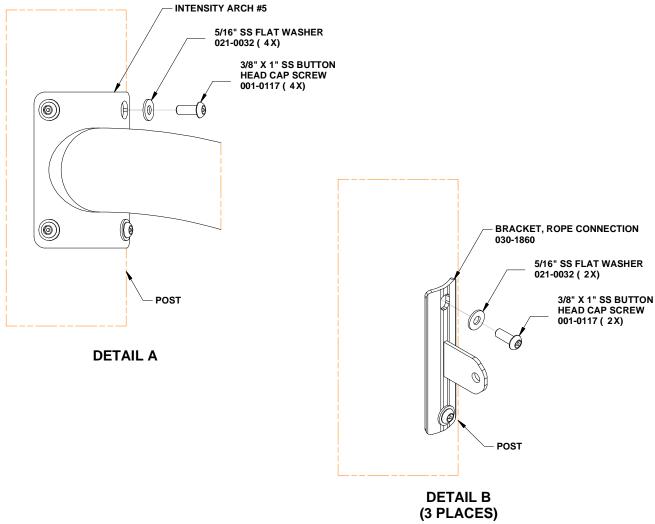


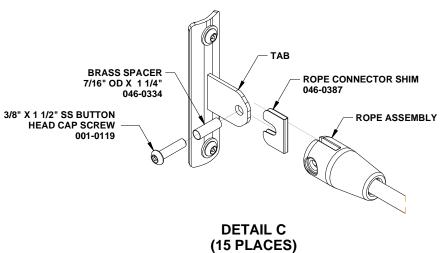




### 370-1583 APEX ROPE CLIMBER







### 370-1583 APEX ROPE CLIMBER

PART NO.	DESCRIPTION	QTY
020-0046	ROPE ASSEMBLY, INTENSITY ARCH NET	1
020-0047	ROPE ASSEMBLY, SINGLE, 32 5/8"	1
020-0048	ROPE ASSEMBLY, SINGLE, 20 1/2"	1
020-0049	ROPE ASSEMBLY, SINGLE, 15 5/16"	1
030-1860	BRACKET, ROPE CONNECTION	3
030-2352	INTENSITY ARCH #5	1
030-2353	INTENSITY ARCH #6	1
036-1411	HARDWARE PACKAGE	1
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	15

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

#### SPECIFICATIONS 3

ROPE ASSEMBLY, INTENSITY ARCH NET; ROPE ASSEMBLY, SINGLE, 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 consisting of 8 galvanized steel wires tightly covered with multifilament polypropylene fibers. Aluminum end connectors and ferrules with stainless steel screws.

BRACKET, ROPE CONNECTION: 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.

INTENSITY ARCH #5: One piece all welded construction consisting of formed 3 1/2" OD x 11 GA

galvanized steel tubing, formed 7 GA stainless steel sheet and 8 GA galvanized steel plates. Finished with a baked on powder coating.

INTENSITY ARCH #6: One piece all welded construction consisting of formed 2 3/8" OD x 10 GA galvanized steel tubing and 8 GA galvanized steel plates. 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: 150 LBS.

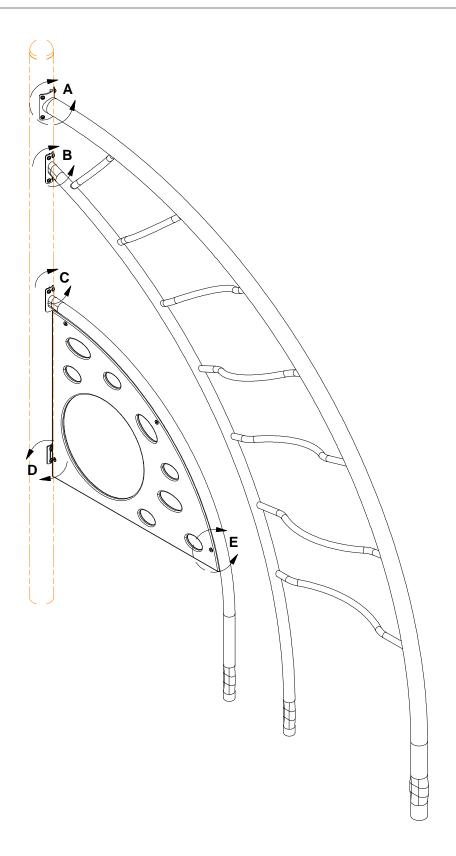
#### INSTALLATION INSTRUCTIONS

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.

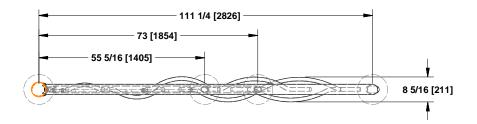
370-1583 APEX ROPE CLIMBER REV: 00 PCN: 14-0103 11/7/2014

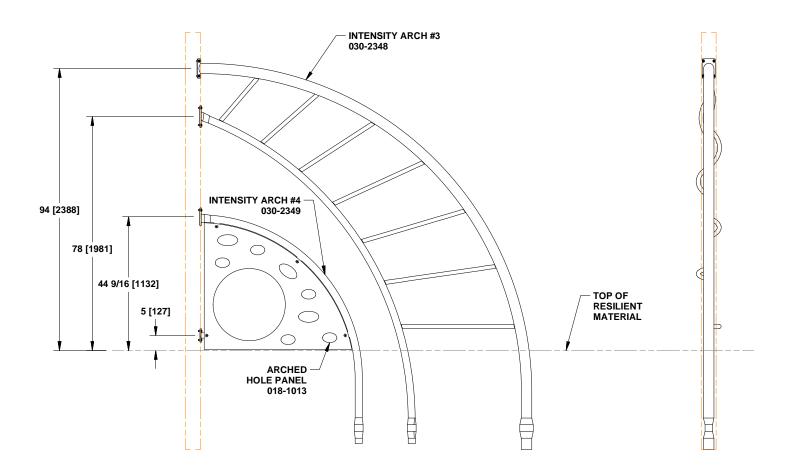




### 370-1584 APEX WAVE CLIMBER

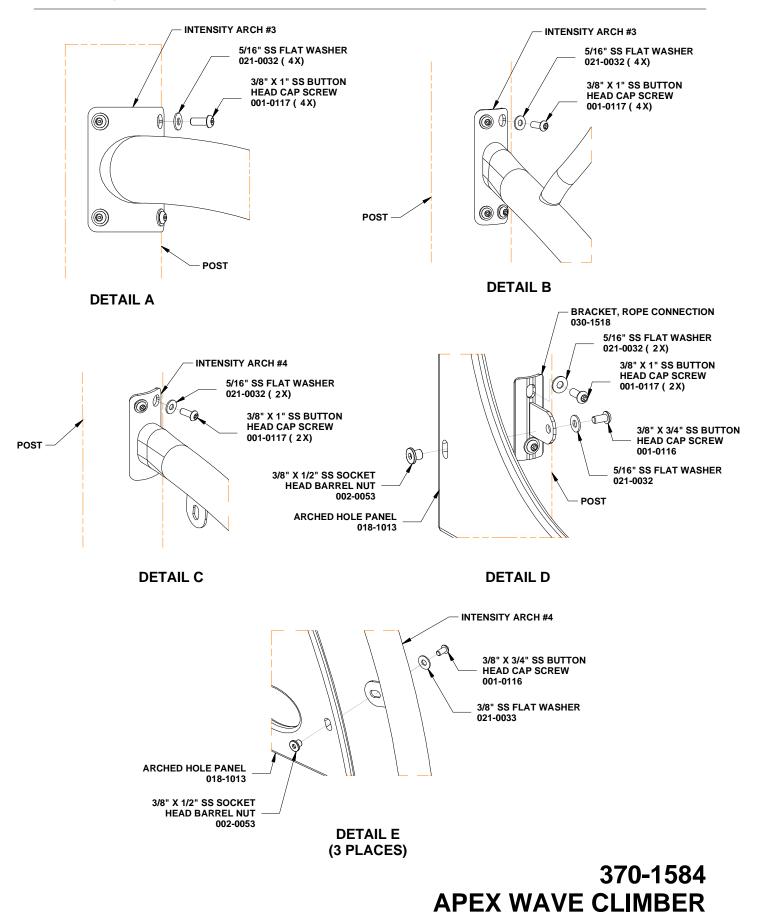






### 370-1584 APEX WAVE CLIMBER





PARISLISI		
PART NO.	DESCRIPTION	QTY
018-1013	ARCHED HOLE PANEL	1
030-1518	BRACKET, ROPE CONNECTION	1
030-2348	INTENSITY ARCH #3	1
030-2349	INTENSITY ARCH #4	1
036-1412	HARDWARE PACKAGE	1

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

#### **SPECIFICATIONS**

ARCHED HOLE PANEL: 3/4" extruded HDPE.

BRACKET, ROPE CONNECTION: 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.

INTENSITY ARCH #3: One piece all welded construction consisting of formed 3 1/2" x 11 GA & 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.

INTENSITY ARCH #4: 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.

HARDWARE PACKAGE: Stainless steel and zinc plated steel.

SHIPPING WEIGHT: 184 LBS.

#### **INSTALLATION INSTRUCTIONS**

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.

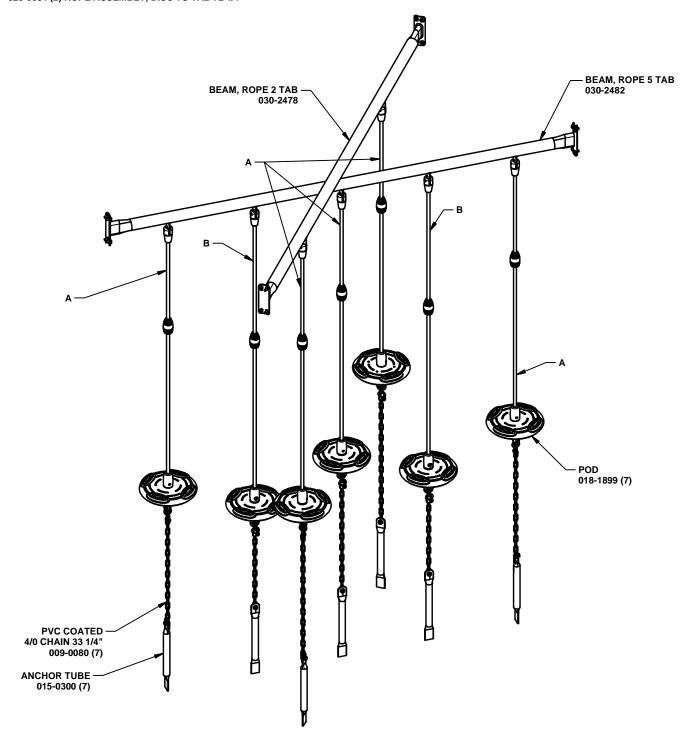
370-1584 APEX WAVE CLIMBER REV: 01 PCN: 14-0292 12/11/2014



#### **ISO VIEW**

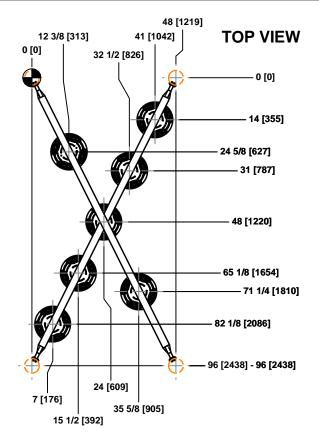
ROPE NOTES:

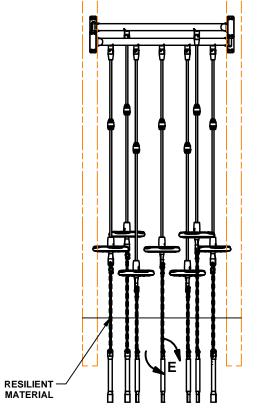
ROPE A - 020-0071 (5) ROPE ASSEMBLY, DISC TO TAB 64 1/8" ROPE B - 020-0084 (2) ROPE ASSEMBLY, DISC TO TAB 72 1/4"

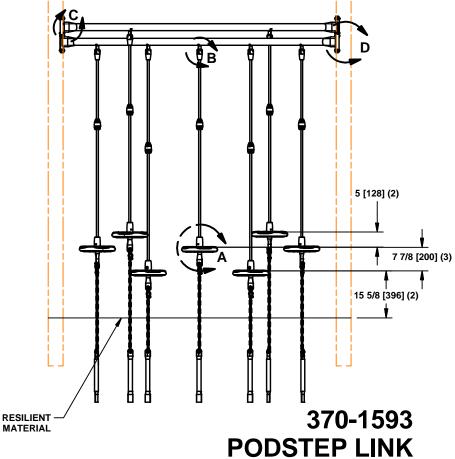


# **370-1593 PODSTEP LINK**

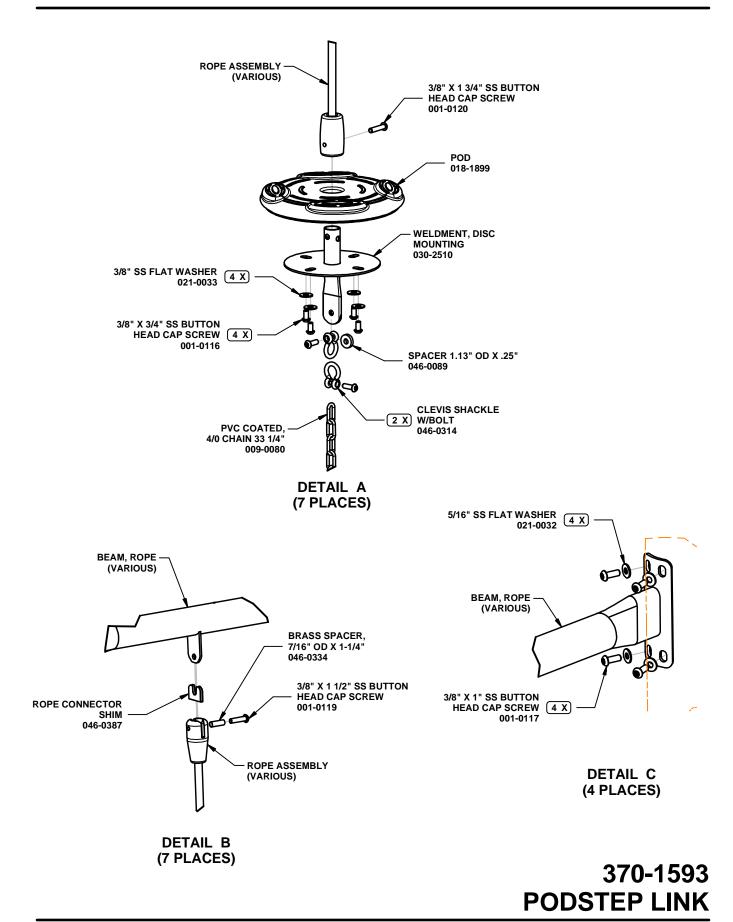




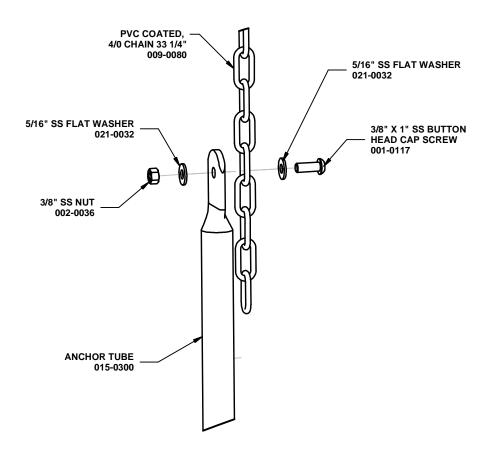












DETAIL D (7 PLACES)

## **370-1593 PODSTEP LINK**

PARTS LIST —				
PART NO.	DESCRIPTION	<u>QTY</u>		
009-0080	PVC COATED 4/0 CHAIN 33 1/4"	7		
015-0300	ANCHOR TUBE	7		
018-1899	POD	7		
020-0071	ROPE ASSEMBLY, DISC TO TAB 64 1/8"	5		
020-0084	ROPE ASSEMBLY, DISC TO TAB 72 1/4"	2		
030-2478	BEAM, ROPE 2 TAB	1		
030-2482	BEAM, ROPE 5 TAB	1		
030-2510	WELDMENT, DISC MOUNTING	7		
036-2010	HARDWARE PACKAGE	1		
046-0089	SPACER 1.13" OD X .25"	7		
046-0291	LOCTITE	1		
046-0314	CLEVIS SHACKLE W/BOLT	14		
046-0334	BRASS SPACER 7/16" OD X 1 1/4"	7		

#### **SPECIFICATIONS**

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.

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.

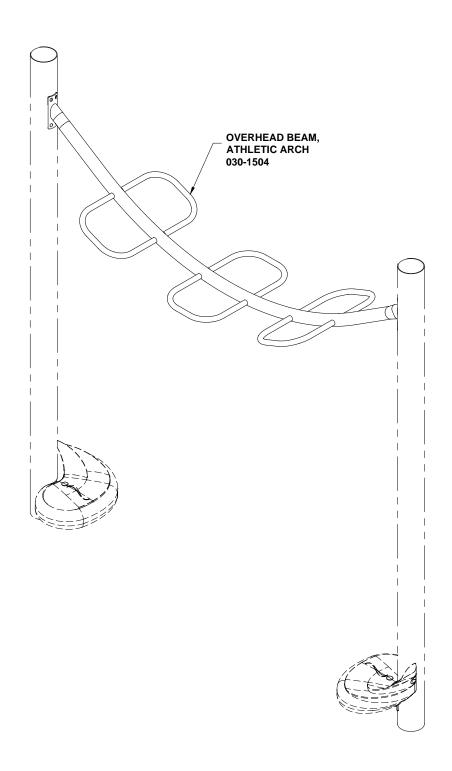
#### **INSTALLATION INSTRUCTIONS**

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.

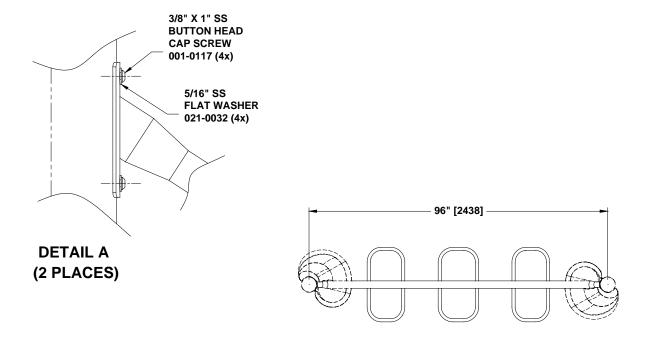
370-1593 PODSTEP LINK REV: 00 PCN: 15-0133 8/15/2016

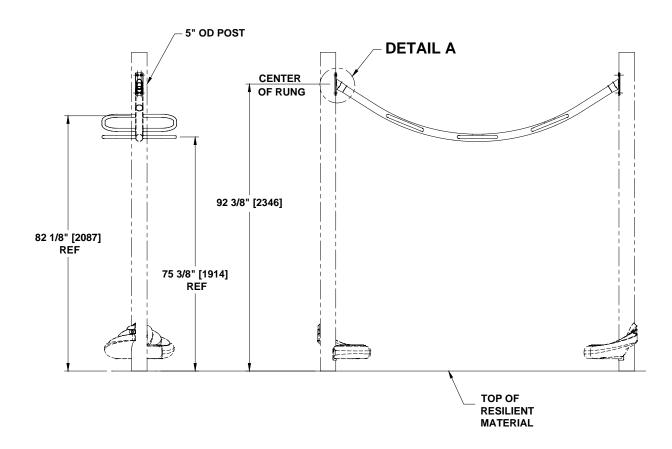




## 370-1610 ATHLETIC ARCH OH







### 370-1610 ATHLETIC ARCH OH

PART NO.	DESCRIPTION	QTY
030-1504	OVERHEAD BEAM, ATHLETIC ARCH	1
036-0258	HARDWARE PACKAGE	4

#### SPECIFICATIONS

OVERHEAD BEAM, ATHLETIC ARCH: One piece all welded construction consisting of 2 3/8" OD x 10 GA & 1.029" OD x 14 GA galvanized steel tubing, and 7 GA galvanized steel plate. Finished with a baked on powder coating.

HARDWARE PACKAGE: Stainless steel.

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

**SHIPPING WEIGHT: 46 LBS.** 

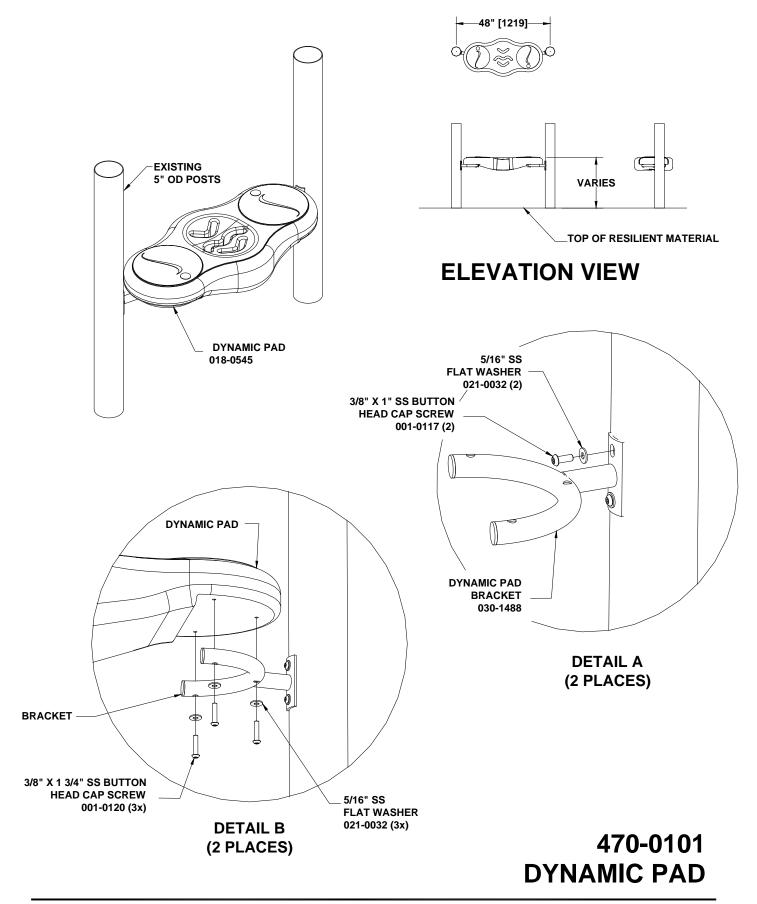
#### **INSTALLATION INSTRUCTIONS**

- 1. 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.	<b>DESCRIPTION</b>	<u>QTY</u>
018-0545	DYNAMIC PAD	1
030-1488	BRACKET, DYNAMIC PAD	2
036-1425	HARDWARE PACKAGE	1

PARTS LIST

#### SPECIFICATIONS

<u>DYNAMIC PAD</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.

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: Stainless steel

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

**SHIPPING WEIGHT: 27 LBS.** 

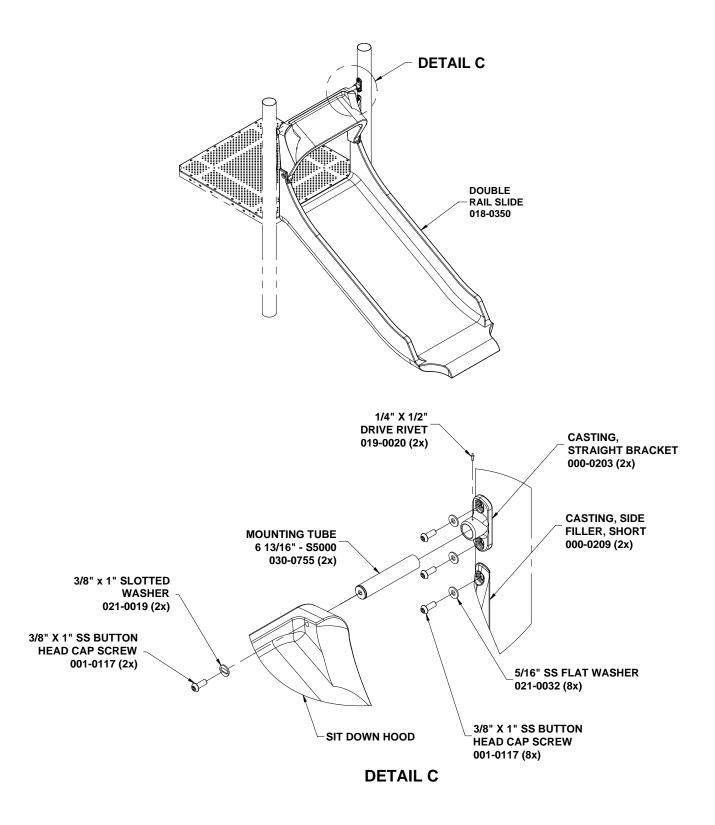
#### **INSTALLATION INSTRUCTIONS**

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.

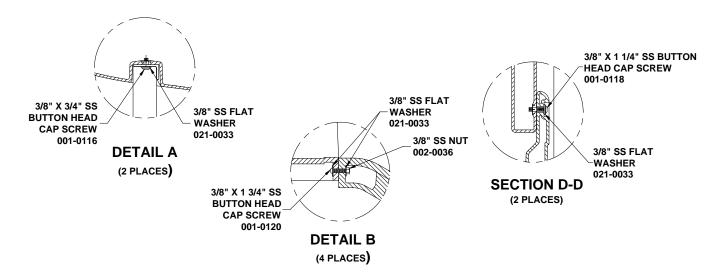
470-0101.doc Description: DYNAMIC PAD REV: 01 PCN: 15-0016 1/28/2015

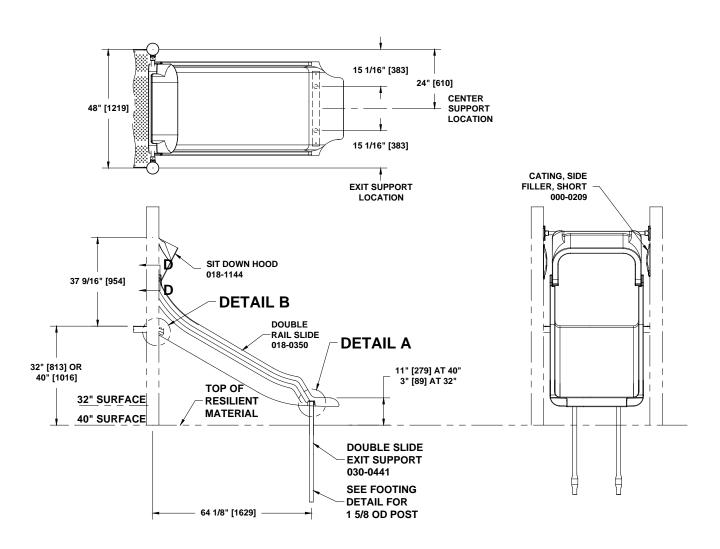




### 470-0435 DOUBLE RAIL SLIDE 32"-40"







470-0435 DOUBLE RAIL SLIDE 32"-40"

	PARTS LIST ———	
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>
000-0203	CASTING, STRAIGHT BRACKET	2
000-0209	CASTING, SIDE FILLER, SHORT	2
018-0350	DOUBLE RAIL SLIDE	1
018-1144	SIT DOWN HOOD	1
030-0441	DOUBLE SLIDE EXIT SUPPORT	1
030-0755	MOUNTING TUBE 6 13/16" - S5000	2
036-1374	HARDWARE PACKAGE	1

#### **SPECIFICATIONS**

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

<u>CASTING</u>, <u>SIDE FILLER</u>, <u>SHORT</u>: A56 Aluminum. Finished with baked on powder coating.

<u>DOUBLE RAIL SLIDE</u>: 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.

<u>DOUBLE SLIDE EXIT SUPPORT</u>: 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.

<u>HARDWARE PACKAGE</u>: Stainless steel screws, nuts & washers and aluminum rivets with 302 stainless steel pin.

**SHIPPING WEIGHT: 127 LBS.** 

#### INSTALLATION INSTRUCTIONS

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

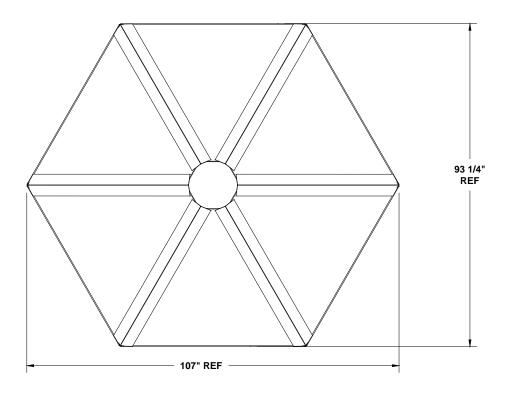
NOTE: Do not tighten hardware until instructed to do so.

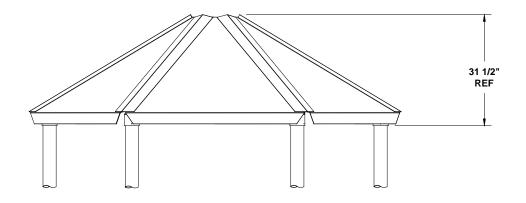
- 1. After platform has been installed, locate and dig footing hole as per dimensions shown. See footing detail drawing, which is located in the preface of your installation manual.
- 2. Attach DOUBLE SLIDE EXIT SUPPORT to slide using 3/8" x 3/4" button head cap screws and 3/8" washers. See DETAIL A. Tighten fasteners.
- 3. 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.
- 4. 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.
- 6. 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.
- 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.

470-0435.doc Description: DOUBLE RAIL SLIDE 32"-40"

REV: 01 PCN: 14-0046 3/17/2014

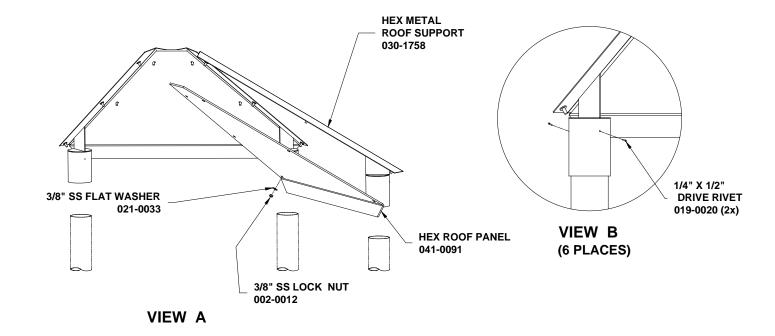


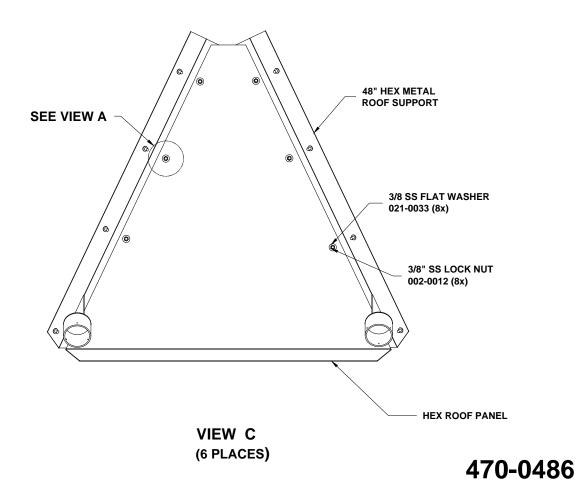




## 470-0486 HEX METAL ROOF







**HEX METAL ROOF** 

<u>DESCRIPTION</u>	<u>QTY</u>
48" HEX METAL ROOF SUPPORT	6
HARDWARE PACKAGE	1
HEX ROOF PANEL	6
	48" HEX METAL ROOF SUPPORT HARDWARE PACKAGE

PARTS LIST

#### **SPECIFICATIONS**

48" HEX METAL ROOF SUPPORT: 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.

<u>HARDWARE PACKAGE</u>: Stainless steel washers, zinc plated steel nuts and aluminum rivets with stainless steel pins.

<u>HEX ROOF PANEL</u>: 14 ga galv sheet steel, finished with a baked on powder coating.

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

**SHIPPING WEIGHT: 280 LBS.** 

#### **INSTALLATION INSTRUCTIONS**

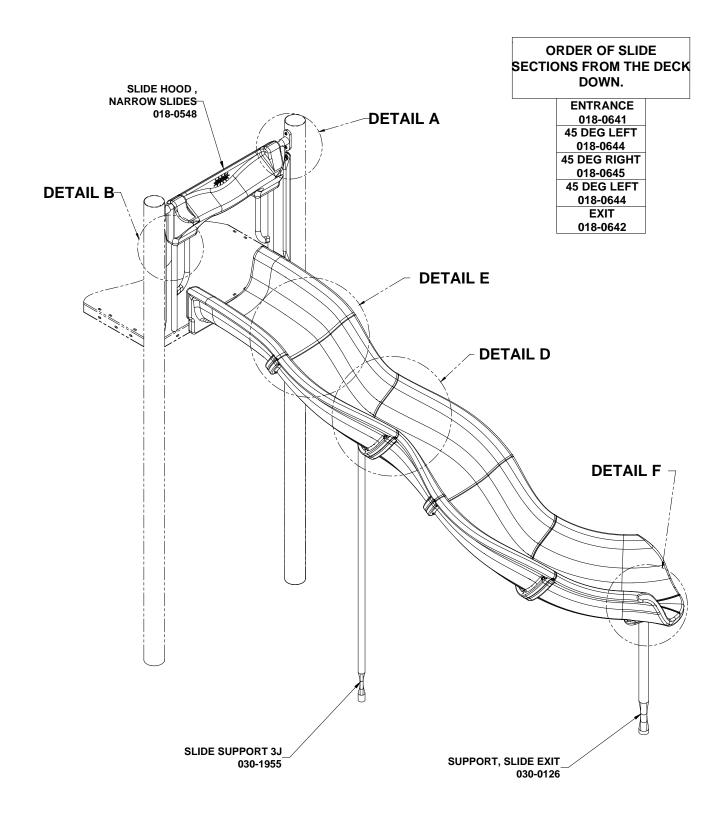
NOTE: Do not tighten hardware until instructed to do so.

- 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.

470-0486.doc Description: HEX METAL ROOF

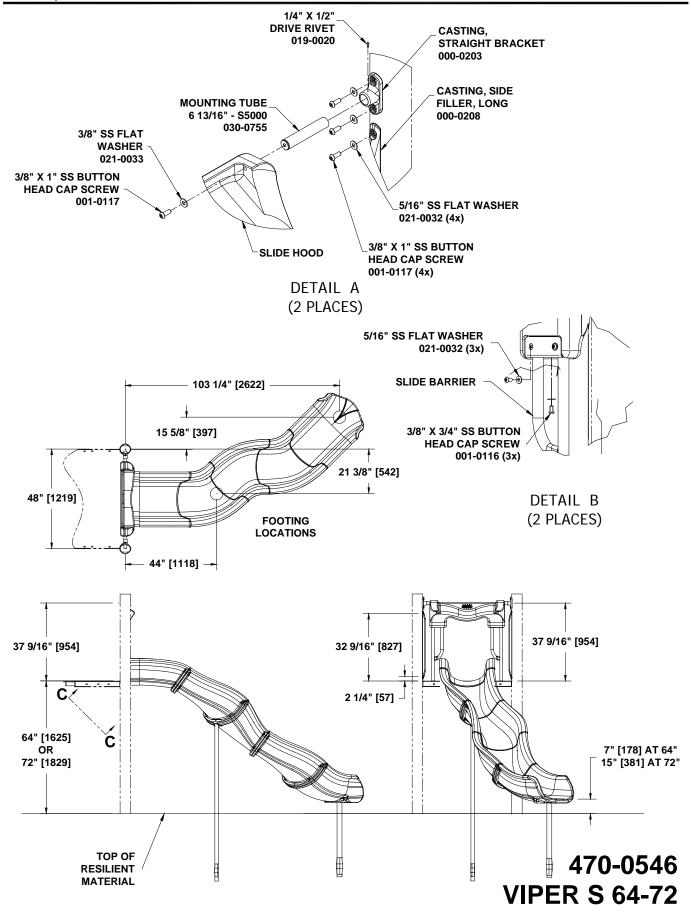
REV: 02 PCN: 14-0094 4/30/2014



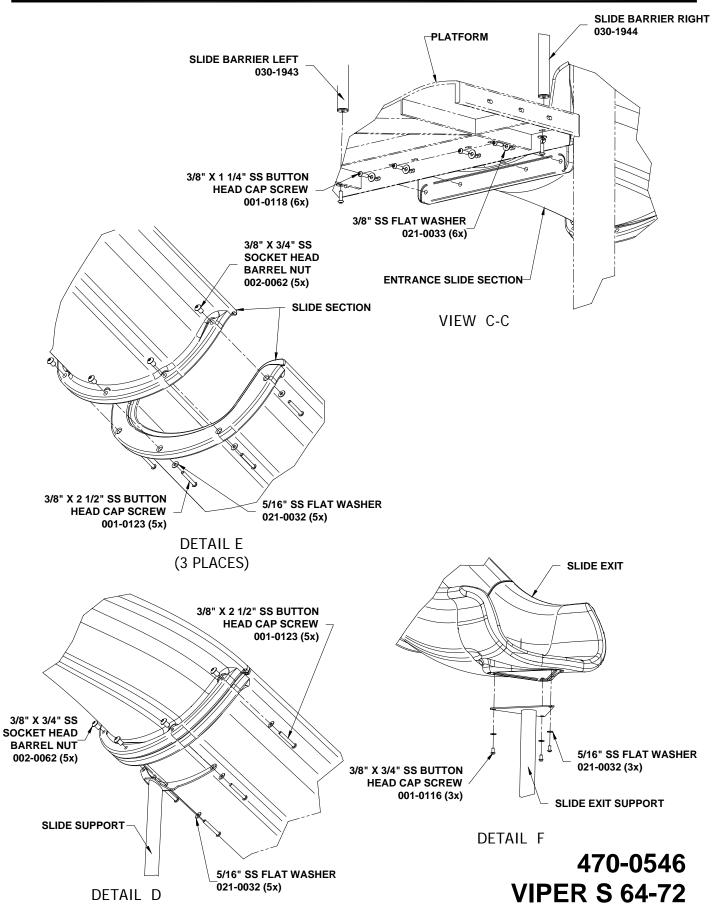


470-0546 VIPER S 64-72









PART NO.	PARTS LIST <u>DESCRIPTION</u>	<u>QTY</u>
000-0203	CASTING, STRAIGHT BRACKET	2
000-0208	CASTING, SIDE FILLER, LONG	2
018-0548	SLIDE HOOD , NARROW SLIDES	1
018-0641	ENTRANCE SLIDE SECTION	1
018-0642	EXIT SLIDE SECTION	1
018-0644	45 DEG LEFT SLIDE SECTION	2
018-0645	45 DEG RIGHT SLIDE SECTION	1
030-0126	SUPPORT, SLIDE EXIT	1
030-0755	MOUNTING TUBE 6 13/16" - S5000	2
030-1943	SLIDE BARRIER LEFT	1
030-1944	SLIDE BARRIER RIGHT	1
030-1955	SLIDE SUPPORT 3J	1
036-1143	HARDWARE PACKAGE	2
036-1148	HARDWARE PACKAGE	1

#### SPECIFICATIONS

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

<u>CASTING, SIDE FILLER, LONG</u>: A56 Aluminum. Finished with baked on powder coating.

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 textured surface.

45 DEG LEFT SLIDE SECTION; 45 DEG RIGHT SLIDE SECTION: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction, and a textured surface.

SUPPORT, SLIDE EXIT: One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and 8 GA galvanized sheet steel. Finished with a baked on powder coating.

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.

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.

<u>SLIDE SUPPORT 3J</u>: 8 gage formed plate welded to 1.660" OD tubing. Finished with baked on powder coat.

HARDWARE PACKAGE: Stainless steel

HARDWARE PACKAGE: Stainless steel hardware and aluminum rivets.

SHIPPING WEIGHT: 185 LBS.

#### INSTALLATION INSTRUCTIONS

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.

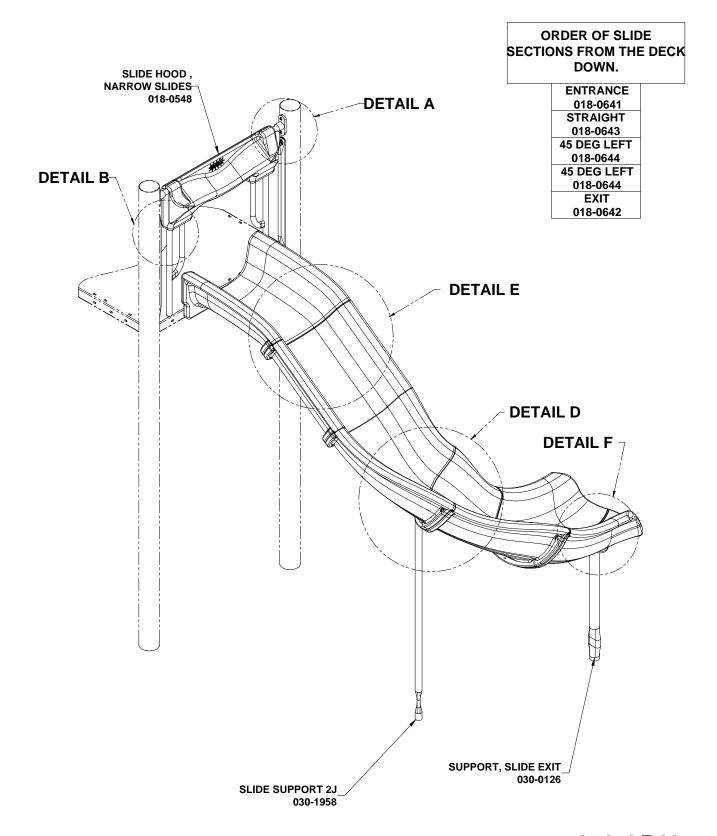
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

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.
- 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

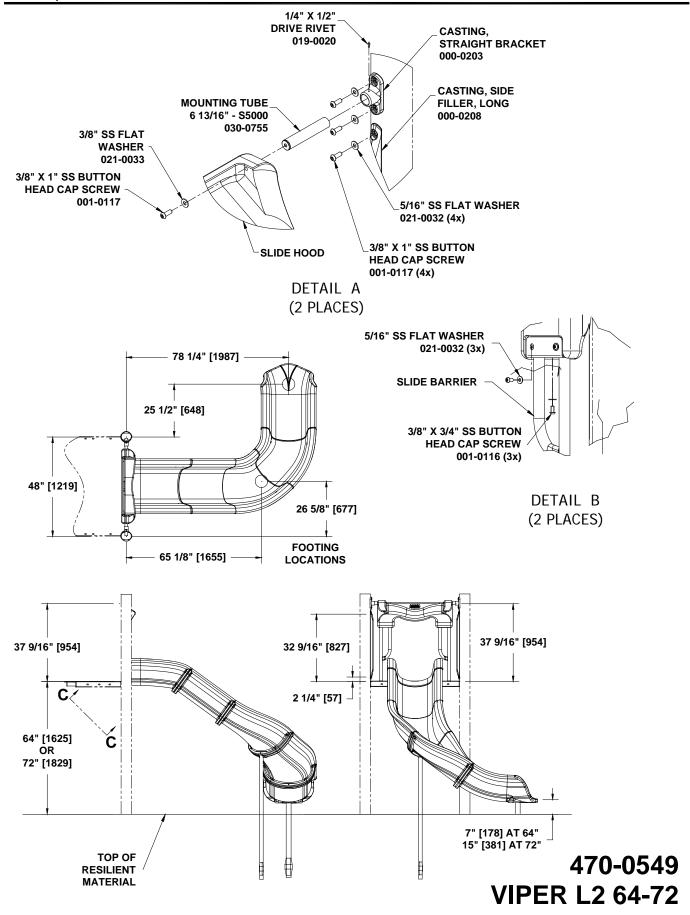
470-0546.doc Description: VIPER S 64-72 REV: 01 PCN: 13-0103 6/4/2013



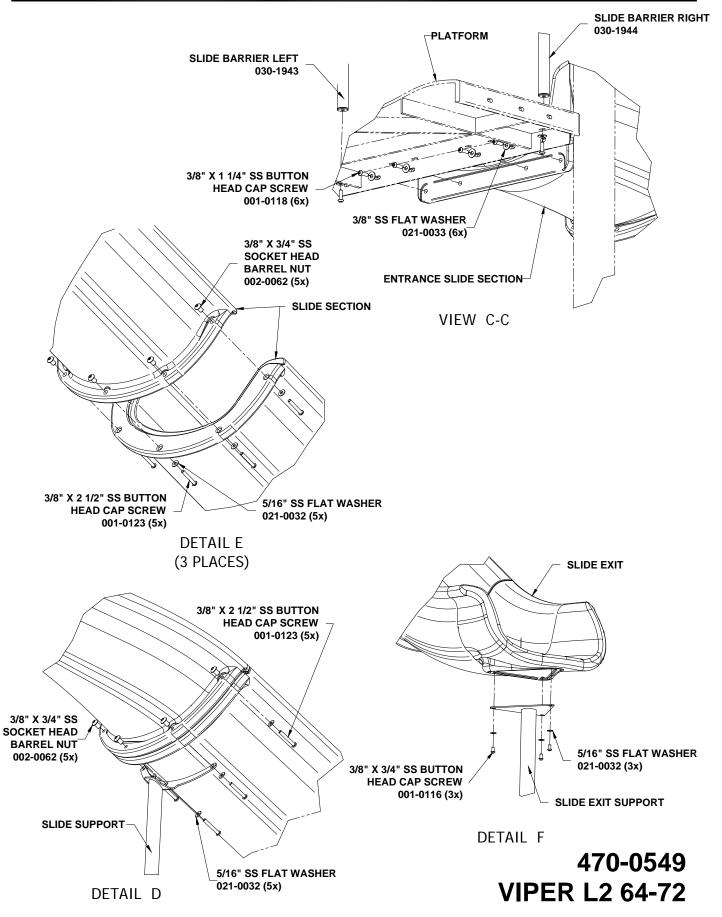


470-0549 VIPER L2 64-72









PART NO.	PARTS LIST <u>DESCRIPTION</u>	QTY
000-0203	CASTING, STRAIGHT BRACKET	2
000-0208	CASTING, SIDE FILLER, LONG	2
018-0548	SLIDE HOOD , NARROW SLIDES	1
018-0641	ENTRANCE SLIDE SECTION	1
018-0642	EXIT SLIDE SECTION	1
018-0643	STRAIGHT SLIDE SECTION	1
018-0644	45 DEG LEFT SLIDE SECTION	2
030-0126	SUPPORT, SLIDE EXIT	1
030-0755	MOUNTING TUBE 6 13/16" - S5000	2
030-1943	SLIDE BARRIER LEFT	1
030-1944	SLIDE BARRIER RIGHT	1
030-1958	SLIDE SUPPORT 2J	1
036-1143	HARDWARE PACKAGE	2
036-1148	HARDWARE PACKAGE	1

#### SPECIFICATIONS

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

<u>CASTING, SIDE FILLER, LONG</u>: A56 Aluminum. Finished with baked on powder coating.

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 textured surface.

STRAIGHT SLIDE SECTION; 45 DEG LEFT SLIDE SECTION: 1/4" thick, linear, low density, rotationally molded, U.V. stabilized polyethylene with double wall construction, and a textured surface.

 $\underline{\text{SUPPORT}}, \underline{\text{SLIDE EXIT}};$  One piece all welded construction consisting of 2 3/8" OD x 12 GA galvanized steel tubing and 8 GA galvanized sheet steel. Finished with a baked on powder coating.

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.

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.

<u>SLIDE SUPPORT 2J</u>: 8 gage formed plate welded to 1.660" OD tubing. Finished with baked on powder coat.

HARDWARE PACKAGE: Stainless steel

HARDWARE PACKAGE: Stainless steel hardware and aluminum rivets.

SHIPPING WEIGHT: 183 LBS.

#### INSTALLATION INSTRUCTIONS

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.

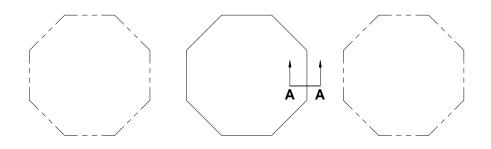
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

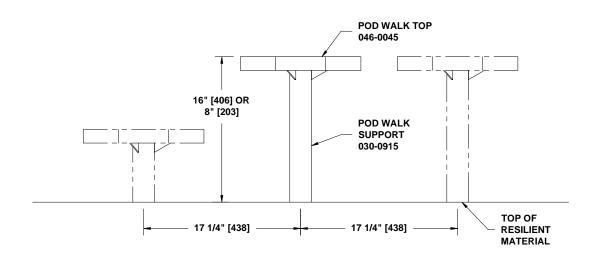
NOTE: Specific hardware used for assembly is shown in the Detail views.

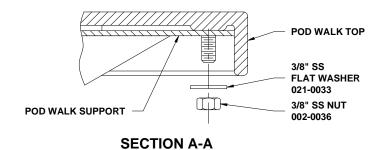
- 1. Install platform(s). See appropriate installation instructions located in your installation manual.
- 2. Dig footing holes for slide supports per dimensions shown. See typical concrete footing details which are located in the preface of your installation manual
- 3. Attach CAST SIDE FILLER, LONG 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.
- 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

470-0549.doc Description: VIPER L2 64-72 REV: 01 PCN: 13-0103 6/4/2013









## 560-0526 SINGLE POD WALK 8"-16"

PART NO.	DESCRIPTION	<u>QTY</u>
030-0915	POD WALK SUPPORT 40"	1
036-0596	HARDWARE PACKAGE	1
046-0045	POD WALK TOP	1

**PARTS LIST** 

#### **SPECIFICATIONS**

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.

HARDWARE PACKAGE: Stainless steel.

POD WALK TOP: Formed 1/8" sheet steel with studs welded into place. PVC coated after fabrication.

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

SHIPPING WEIGHT: 27 LBS.

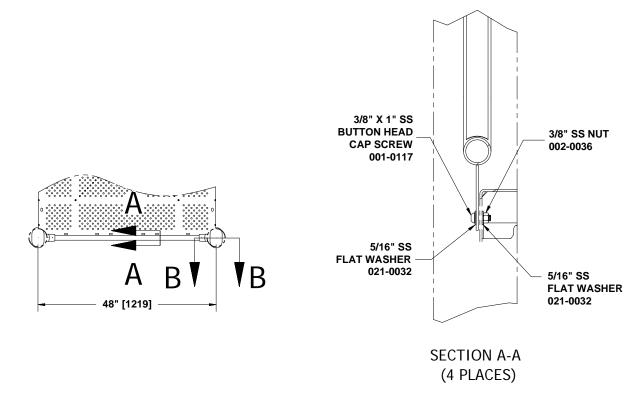
#### **INSTALLATION INSTRUCTIONS**

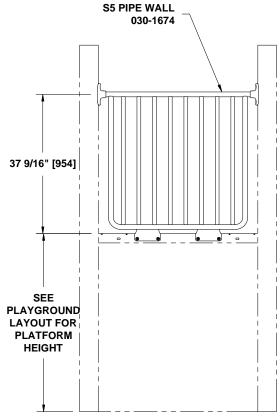
- Determine location of Pod Walk.
- 1. Dig footing holes per dimensions. See typical footing details, which are located in the preface of your installation manual.
- 2. Attach POD WALK SUPPORT to POD WALK TOP using 3/8 SS flat washers and 3/8 SS nuts. See SECTION A-A.
- 3. Tighten hardware
- 4. Insert 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.

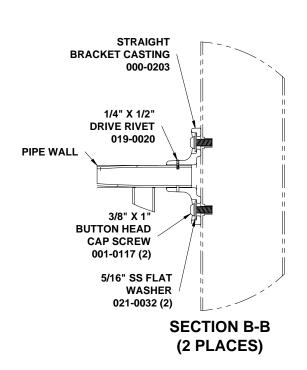
560-0526.doc Description: SINGLE POD WALK 8"-16"

REV: 00 PCN: 09-0104 5/12/2009









# **570-0394 PIPE WALL**

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PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>		
000-0203	CASTING, STRAIGHT BRACKET	2		
030-1674	S5 PIPE WALL	1		
036-0258	HARDWARE PACKAGE	4		
036-0806	HARDWARE PACKAGE	1		
036-0819	HARDWARE PACKAGE	1		

#### SPECIFICATIONS

<u>CASTING, STRAIGHT BRACKET</u>: 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

HARDWARE PACKAGE: Aluminum Rivets

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

SHIPPING WEIGHT: 37 LBS.

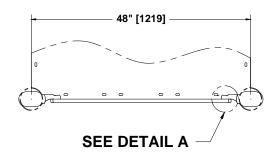
#### **INSTALLATION INSTRUCTIONS**

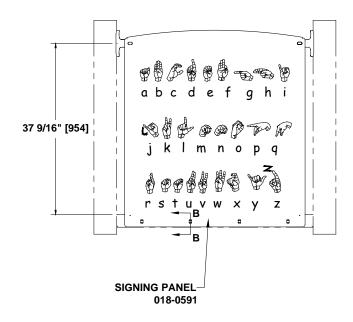
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

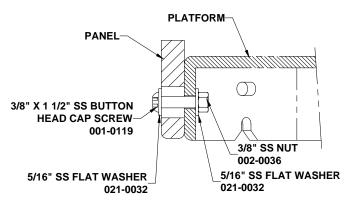
- 1. Slide BRACKETS onto tube on PIPE WALL.
- 2. Attach brackets with pipe wall to 5" OD post using 3/8" x 1" SS button head cap screws and 5/16" SS washers. See SECTION B-B.
- 3. Attach bottom of pipe wall to platform using 3/8" x 1" SS button head cap screws, 5/16" SS washers and 3/8" SS nuts. Tighten 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.
- Tighten All Hardware.

570-0394.doc Description: PIPE WALL REV: 00 PCN: 09-0021 8/14/2009

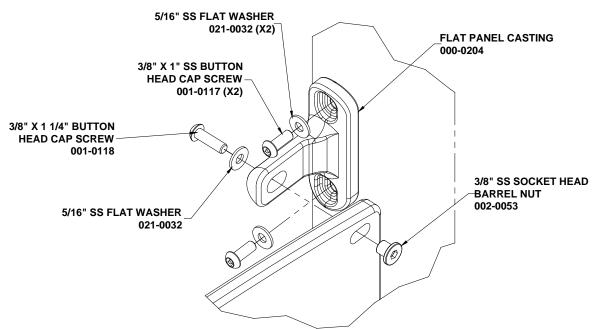








**SECTION B-B (4 PLACES)** 



**DETAIL A (2 PLACES)** 

570-0597 SIGNING PANEL

PART NO.	DESCRIPTION	QTY
000-0204	CASTING, FLAT PANEL	2
018-0591	SIGNING PANEL	1
036-1241	HARDWARE PACKAGE	1

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

SIGNING PANEL: 3/4" co-extruded HDPE.

**HARDWARE PACKAGE**: Stainless steel

SHIPPING WEIGHT: 46 LBS.

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

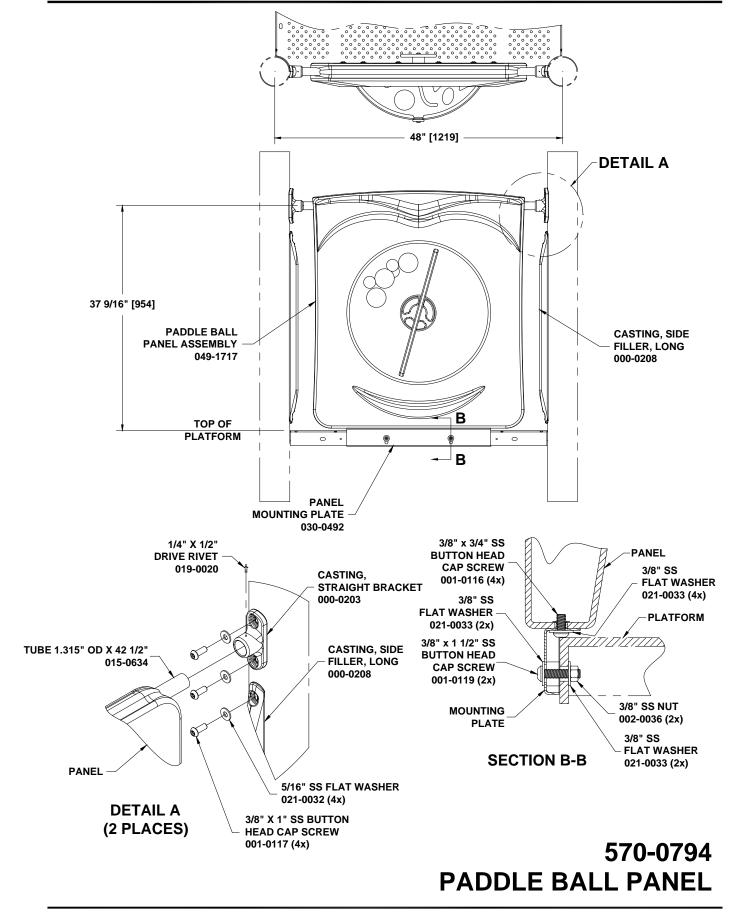
#### **INSTALLATION INSTRUCTIONS**

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 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.

570-0597.doc Description: SIGNING PANEL REV: 01 PCN: 14-0029 2/25/2014





PARTS LIST					
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>			
000-0203	CASTING, STRAIGHT BRACKET	2			
000-0208	CASTING, SIDE FILLER, LONG	2			
015-0634	TUBE 1.315" OD X 42 1/2"	1			
030-0492	PANEL MOUNTING PLATE	1			
036-1168	HARDWARE PACKAGE	1			
049-1717	PADDLE BALL PANEL ASSEMBLY	1			

#### SPECIFICATIONS

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

<u>CASTING</u>, <u>SIDE FILLER</u>, <u>LONG</u>: 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.

<u>HARDWARE PACKAGE</u>: 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.

SHIPPING WEIGHT: 47 LBS.

#### INSTALLATION INSTRUCTIONS

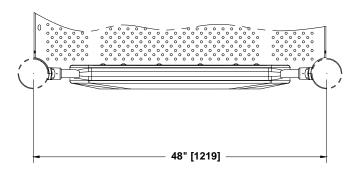
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

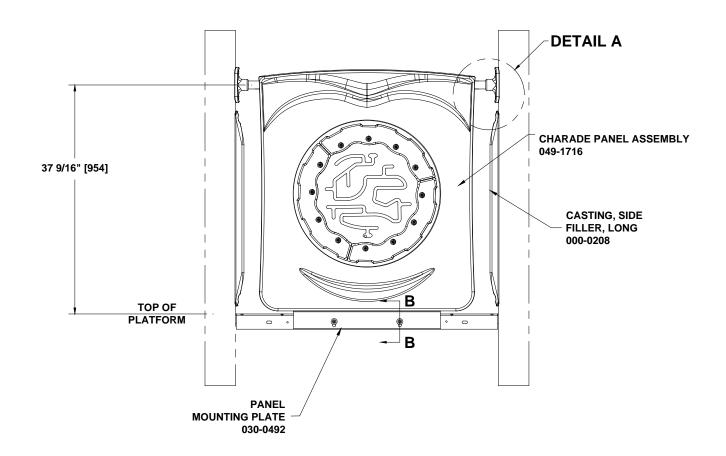
- 1. Attach PANEL MOUNTING PLATE to PADDLE BALL PANEL using 3/8" x 3/4" SS button head cap screws and 3/8"SS flat washers. See SECTION B-B.
- 2. Sleeve TUBE 1.315" OD X 42 1/2" into panel. See DETAIL A.
- 3. Position panel assembly on 5" OD posts and fasten upper hole of CASTING BRACKETS to 5" OD posts 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.
- 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.

570-0794.doc Description: PADDLE BALL PANEL

REV: 00 PCN: 13-0006 9/27/2013

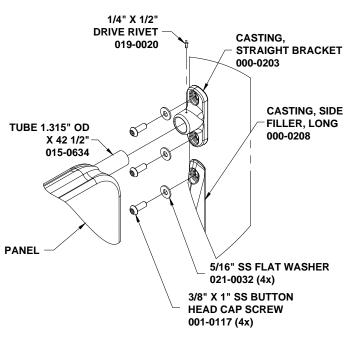




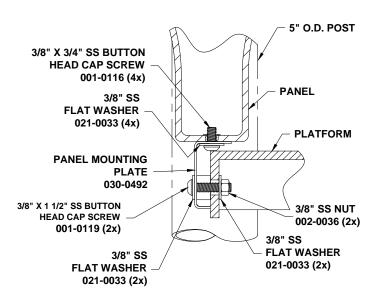


## 570-0797 CHARADE PANEL, ABOVE PLATFORM





DETAIL A (2 PLACES)



**SECTION B-B** 

## 570-0797 CHARADE PANEL, ABOVE PLATFORM

PARTS LIST					
PART NO.	<b>DESCRIPTION</b>	QTY			
000-0203	CASTING, STRAIGHT BRACKET	2			
000-0208	CASTING, SIDE FILLER, LONG	2			
015-0634	TUBE 1.315" OD X 42 1/2"	1			
030-0492	PANEL MOUNTING PLATE	1			
036-1168	HARDWARE PACKAGE	1			
049-1716	CHARADE PANEL ASSEMBLY	1			

#### **SPECIFICATIONS**

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

<u>CASTING</u>, <u>SIDE FILLER</u>, <u>LONG</u>: 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.

<u>HARDWARE PACKAGE</u>: 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.

SHIPPING WEIGHT: 62 LBS.

#### INSTALLATION INSTRUCTIONS

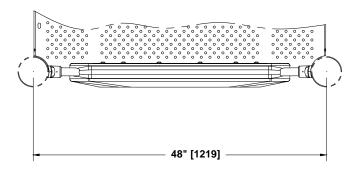
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

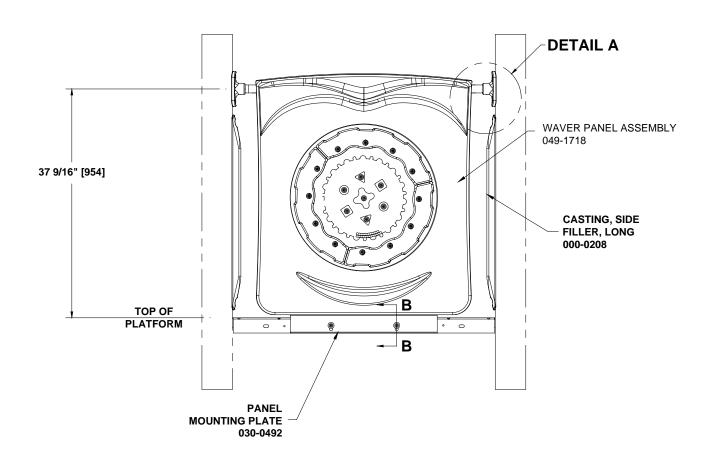
- 1. Attach PANEL MOUNTING PLATE to CHARADE PANEL using 3/8" x 3/4" SS button head cap screws and 3/8"SS flat washers. See SECTION B-B.
- 2. Attach SIDE FILLER CASTINGS to post using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. Tighten hardware. See DETAIL A.
- 3. Sleeve TUBE 1.315" OD X 42 1/2" into panel. See DETAIL A.
- 4. 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.

570-0797.doc Description: CHARADE PANEL, ABOVE PLATFORM

REV: 00 PCN: 13-0006 9/27/2013

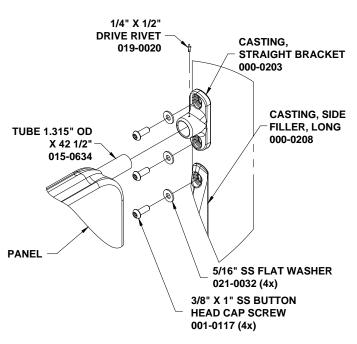




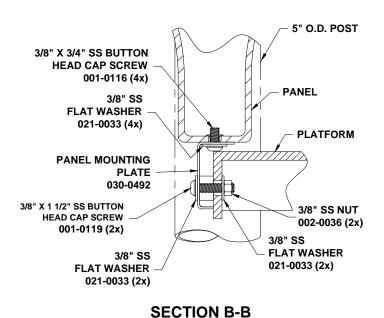


# 570-0798 WAVER PANEL, ABOVE PLATFORM





DETAIL A (2 PLACES)



570-0798 WAVER PANEL, ABOVE PLATFORM

PART NO.	PARTS LIST	QTY
000-0203	CASTING, STRAIGHT BRACKET	2
000-0208	CASTING, SIDE FILLER, LONG	2
015-0634	TUBE 1.315" OD X 42 1/2"	1
030-0492	PANEL MOUNTING PLATE	1
036-1168	HARDWARE PACKAGE	1
049-1718	WAVER PANEL ASSEMBLY	1

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

### **SPECIFICATIONS**

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

<u>CASTING</u>, <u>SIDE FILLER</u>, <u>LONG</u>: A56 Aluminum. Finished with baked on powder coating.

TUBE 1.315" OD X 42 1/2": 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.

SHIPPING WEIGHT: 62 LBS.

# INSTALLATION INSTRUCTIONS

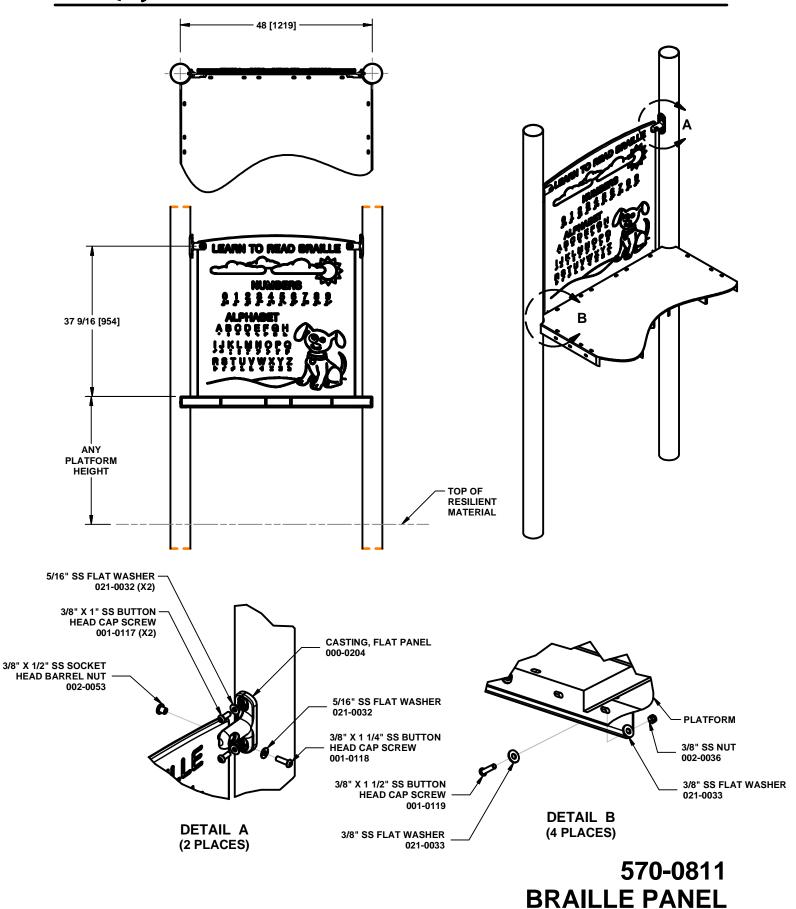
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 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.
- 2. 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.
- 4. 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.doc Description: WAVER PANEL, ABOVE PLATFORM

REV: 00 PCN: 13-006 9/27/2013





PART NO.	DESCRIPTION	<u>QTY</u>
000-0204	CASTING, FLAT PANEL	2
036-1241	HARDWARE PACKAGE	1
0/10-1727	BRAILLE PANEL ASSEMBLY	1

### SPECIFICATIONS =

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

HARDWARE PACKAGE: Stainless steel

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.

# **INSTALLATION INSTRUCTIONS**

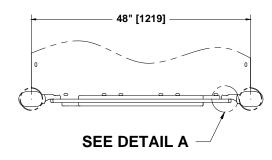
NOTE: PVC coating may need to be removed from mounting holes of parts before installation.

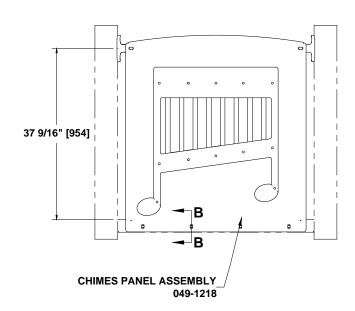
NOTE: Do not tighten hardware until instructed to do so.

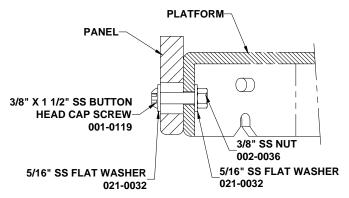
- 1. Determine location of BRAILLE PANEL assembly.
- 2. Attach CASTING, FLAT PANEL to posts using hardware specified in DETAIL A.
- 3. Attach BRAILLE PANEL ASSEMBLY to flat panel castings using hardware specified in DETAIL A.
- 4. Attach panel assembly to platform using hardware specified in DETAIL B.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

570-0811 BRAILLE PANEL REV: PCN: 14-0042 7/11/2014

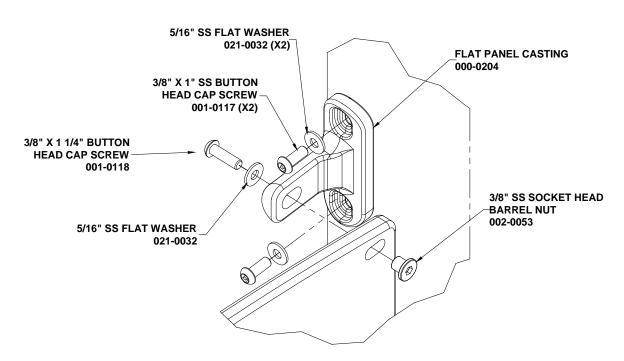








**SECTION B-B (4 PLACES)** 



**DETAIL A (2 PLACES)** 

570-1547 **CHIME PANEL, ABOVE PLATFORM** 

<b>DESCRIPTION</b>	<u>QTY</u>
CASTING, FLAT PANEL	2
HARDWARE PACKAGE	1
CHIMES PANEL ASSEMBLY	1
	CASTING, FLAT PANEL HARDWARE PACKAGE

PARTS LIST

### **SPECIFICATIONS**

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

HARDWARE PACKAGE: Stainless steel

<u>CHIMES PANEL ASSEMBLY</u>: 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: Hardware package(s) may include extra hardware that is not necessary for this installation.

SHIPPING WEIGHT: 60 LBS.

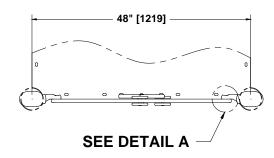
# **INSTALLATION INSTRUCTIONS**

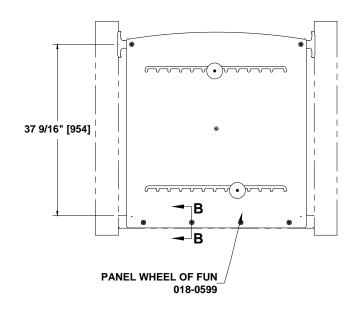
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

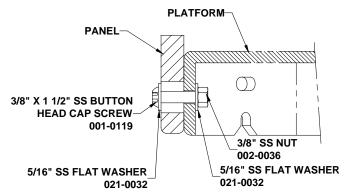
- 1. Attach FLAT PANEL CASTINGS to posts using 3/8" x 1" SS button head cap screws and 5/16" SS flat washers. See DETAIL A.
- 2. Attach CHIMES PANEL to the platform using 3/8" x 1 1/2" SS button head cap screws, 5/16" SS flat washers and 3/8" SS nuts. See SECTION B-B.
- 3. Insert 3/8" SS socket head 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.

570-1547.doc Description: CHIMES PANEL REV: 01 PCN: 14-0029 2/27/2014

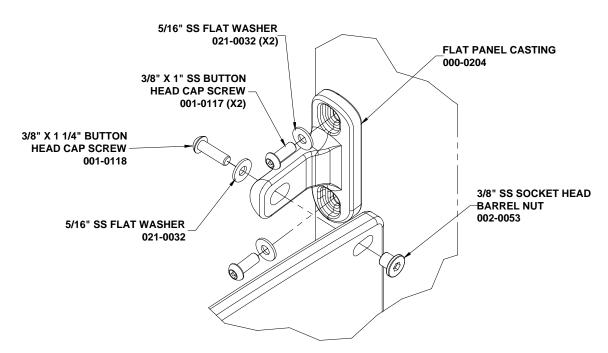








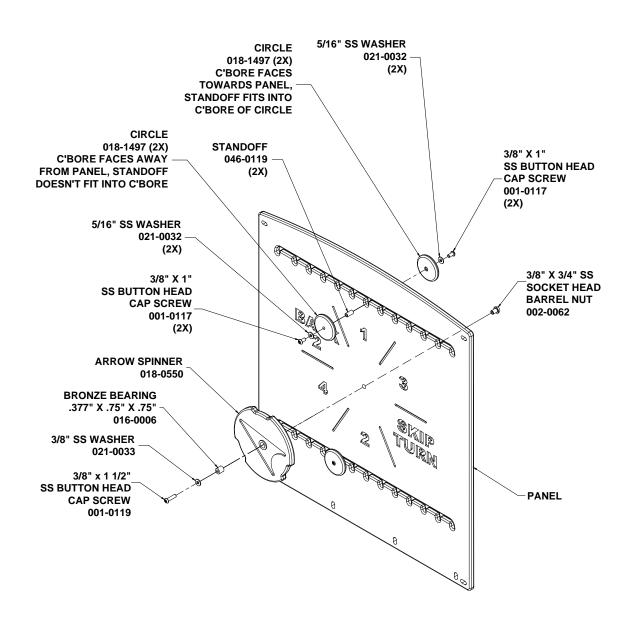
**SECTION B-B (4 PLACES)** 



570-1619
WHEEL OF FUN PANEL

**DETAIL A (2 PLACES)** 





**EXPLODED ASSEMBLY VIEW** 

# 570-1619 WHEEL OF FUN PANEL

PART NO.	PARTS LIST  DESCRIPTION	QTY
000-0204	CASTING, FLAT PANEL	2
016-0006	BRONZE BEARING .377" X .75" X	1
	.75"	
018-0550	ARROW SPINNER	1
018-0599	PANEL, WHEEL OF FUN	1
018-1497	CIRCLE	4
036-1261	HARDWARE PACKAGE	1
046-0119	STANDOFF	2

### **SPECIFICATIONS**

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

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

ARROW SPINNER; PANEL, WHEEL OF FUN: 3/4" co-extruded HDPE.

CIRCLE: 1/2" extruded HDPE

HARDWARE PACKAGE: Stainless steel

STANDOFF: 1/2" OD threaded stainless steel tubing.

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

SHIPPING WEIGHT: 51 LBS.

# **INSTALLATION INSTRUCTIONS**

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

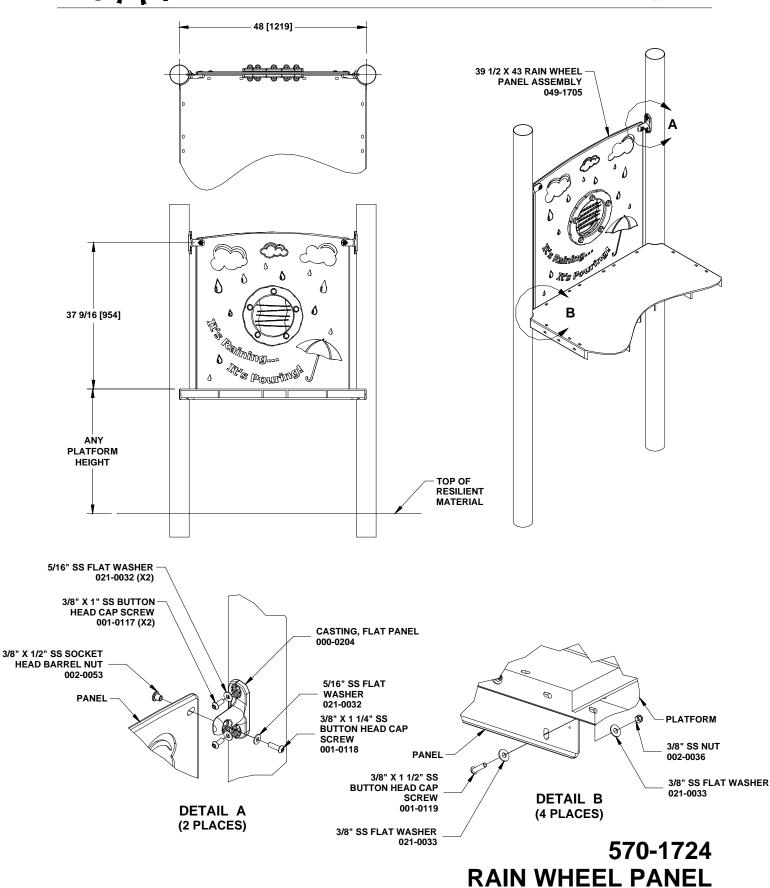
NOTE: Do not tighten hardware until instructed to do so.

- 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.

570-1619.doc Description: WHEEL OF FUN PANEL

REV: 02 PCN: 14-0029 2/27/2014





DESCRIPTION	QTY
CASTING, FLAT PANEL HARDWARE PACKAGE 39 1/2 X 43 RAIN WHEEL PANEL ASSEMBLY	2 1 1
	DESCRIPTION  CASTING, FLAT PANEL  HARDWARE PACKAGE  39 1/2 X 43 RAIN WHEEL PANEL

### **SPECIFICATIONS**

<u>CASTING, FLAT PANEL</u>: 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.

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

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.

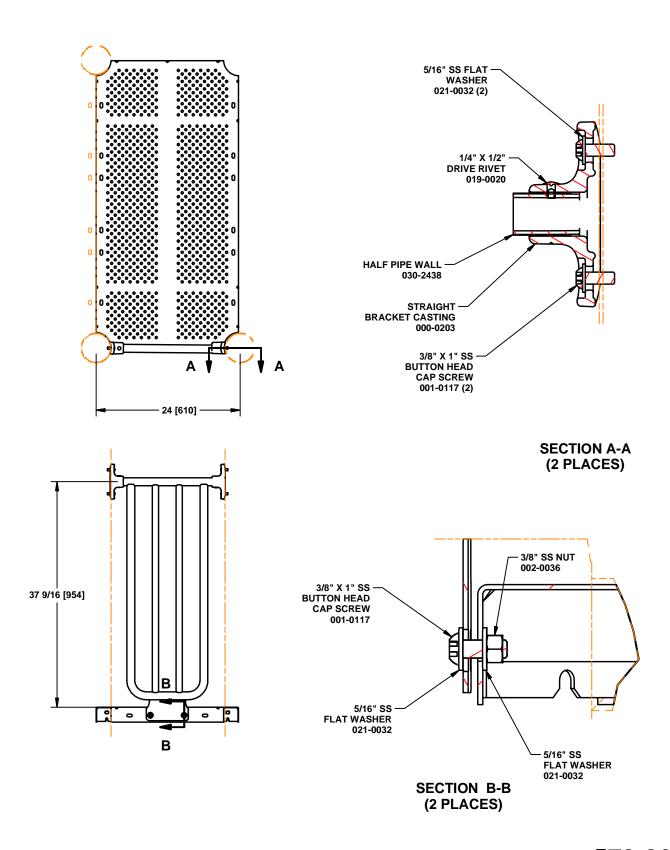
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- 1. Determine location of RAIN WHEEL PANEL assembly.
- 2. Attach CASTING, FLAT PANEL to posts using hardware specified in DETAIL A.
- 3. Attach 39 1/2 X 43 RAIN WHEEL PANEL ASSEMBLY to flat panel castings using hardware specified in DETAIL A.
- 4. 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

	PARISLISI -	
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>
000-0203	CASTING, STRAIGHT BRACKET	2
030-2438	HALF PIPE WALL	1
036-0258	HARDWARE PACKAGE	1
036-0819	HARDWARE PACKAGE	1
036-0870	HARDWARE PACKAGE	1

### SPECIFICATIONS

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

HALF 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: Aluminum Rivets

<u>HARDWARE PACKAGE</u>: Stainless steel screws, washers & nuts, nylon washers and zinc plated steel lock washer.

HARDWARE PACKAGE: Stainless steel.

<u>NOTE:</u> Hardware package(s) may include extra hardware that is not necessary for this installation.

**SHIPPING WEIGHT: 19.6 LBS.** 

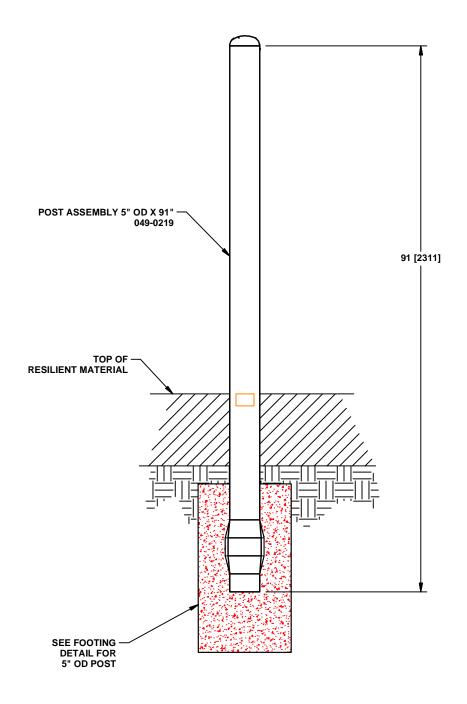
# **INSTALLATION INSTRUCTIONS**

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.

570-2624 HALF PIPE WALL REV: 01 PCN: 17-0009 1/17/2017





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

	PARTS LIST ———	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0219	POST ASSEMBLY 5" OD X 91"	1

**NOTE:** Hardware package(s) may include extra hardware

that is not necessary for this installation.

# SPECIFICATIONS =

POST ASSEMBLY 5" OD X 91": 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.

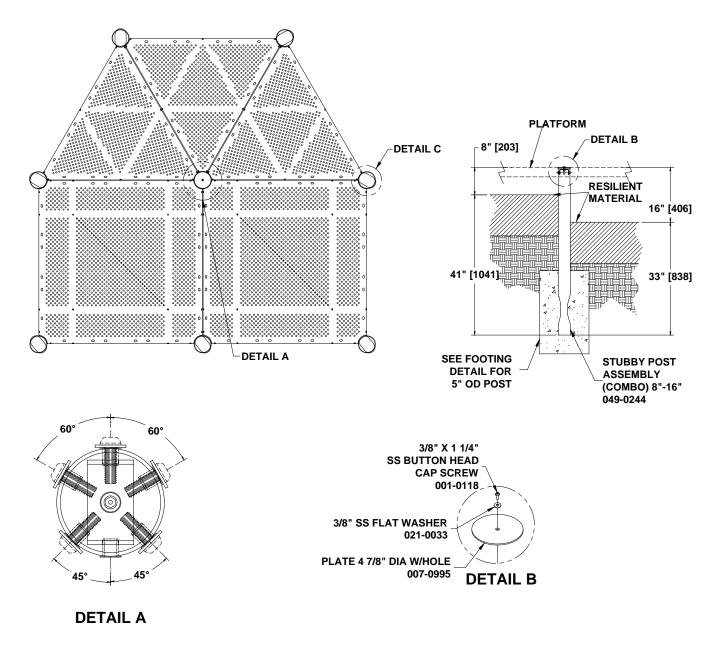
SHIPPING WEIGHT: 49 LBS.

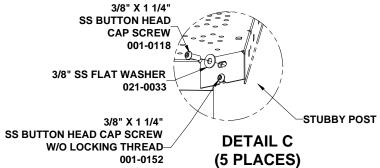
# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

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







# 670-0126 STUBBY POST (COMBO) 8"-16"

**NO WASHER** 

	IANIOLIOI	
PART NO.	<b>DESCRIPTION</b>	<u>QTY</u>
007-0995	PLATE 4 7/8" DIA W/HOLE	1
036-1198	HARDWARE PACKAGE	1
049-0244	STUBBY POST ASSEMBLY (COMBO) 8"-16"	1

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### **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.

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

SHIPPING WEIGHT: 26 LBS.

# **INSTALLATION INSTRUCTIONS**

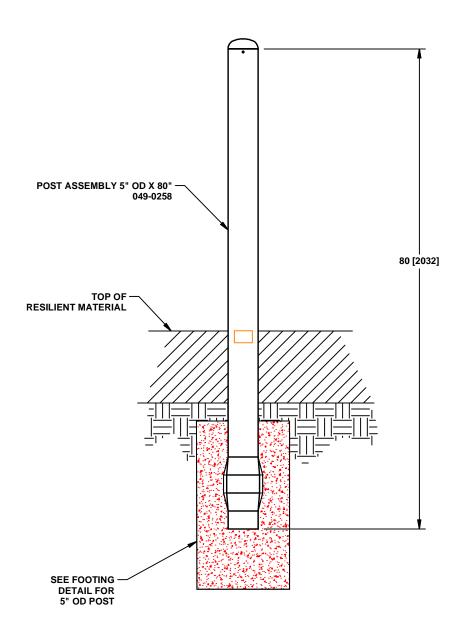
NOTE: PVC coating may need to be removed from mounting holes of parts before installation. NOTE: Do not tighten hardware until instructed to do so.

- 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.
- 5. 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





# 670-0150 POST ASSEMBLY 5" OD X 80"

	PARTS LIST ——	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0258	POST ASSEMBLY 5" OD X 80"	1

**NOTE:** Hardware package(s) may include extra hardware

that is not necessary for this installation.

SPECIFICATIONS —
EMBLY 5" OD X 80": Assembly consisting of 5" OD
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POST ASSEMBLY 5" OD X 80": 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.

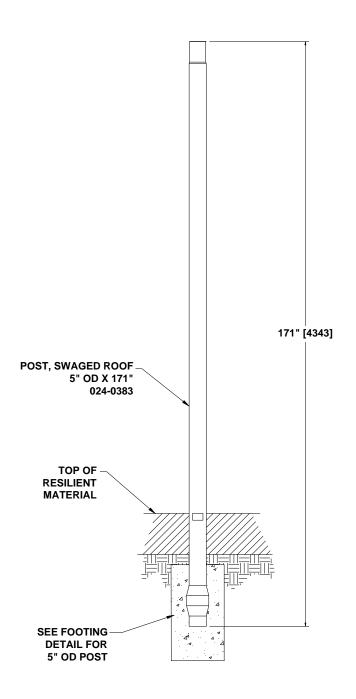
SHIPPING WEIGHT: 43 LBS.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

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"

# PARTS LIST PART NO. DESCRIPTION QTY 024-0383 POST, SWAGED ROOF 5"OD X 1 11GA X 171" Note: Hardware package(s) may include extra hardware that is not necessary for this installation.

### SPECIFICATIONS

POST, SWAGED ROOF 5"OD X 11GA X 171": 5" OD x 11 GA galvanized steel tubing finished with a baked on powder coating.

SHIPPING WEIGHT: 90 LBS.

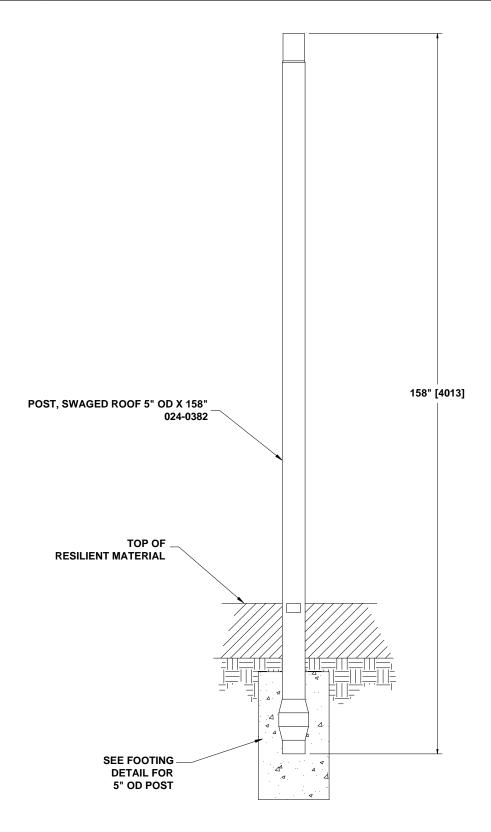
# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5" OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

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"

# PARTS LIST PART NO. DESCRIPTION QTY 024-0382 POST, SWAGED ROOF 5"OD X 1 11GA X 158" Note: Hardware package(s) may include extra hardware that is not necessary for this installation.

### SPECIFICATIONS

POST, SWAGED ROOF 5"OD X 11GA X 158": 5" OD x 11 GA galvanized steel tubing finished with a baked on powder coating.

SHIPPING WEIGHT: 83 LBS.

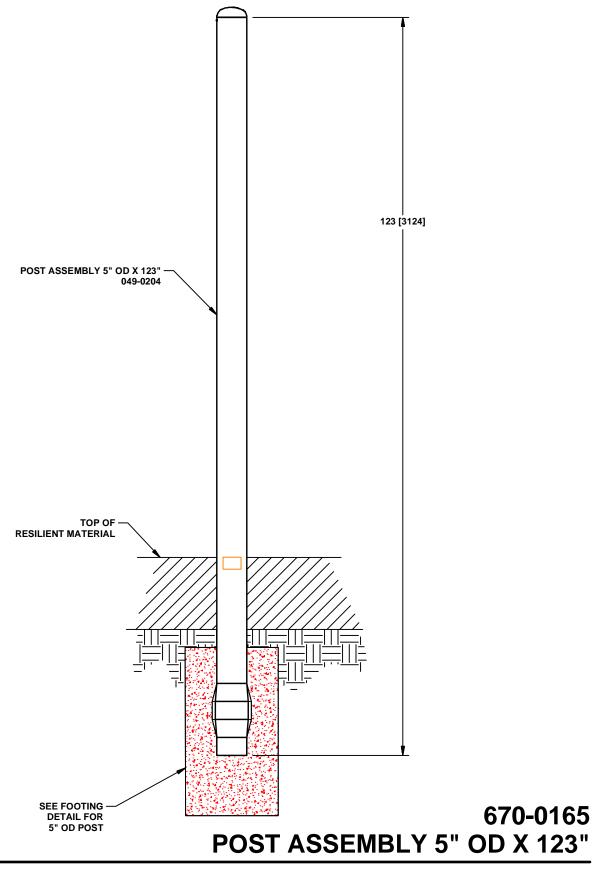
# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5" OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

670-0164.doc Description: POST, SWAGED ROOF 5" OD X 158"

REV: 01 PCN: 10-0339 10/22/2010





	PARISLISI	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0204	POST ASSEMBLY 5" OD X 123"	1

**NOTE:** Hardware package(s) may include extra hardware

that is not necessary for this installation.

# SPECIFICATIONS =

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.

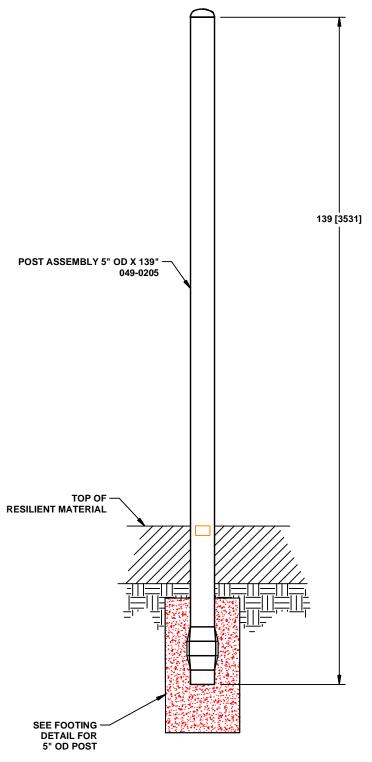
SHIPPING WEIGHT: 66 LBS.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

670-0165 POST ASSEMBLY 5" OD X 123" REV: 02 PCN: 16-0257 12/5/2016





670-0166 POST ASSEMBLY 5" OD X 139"

	PARTS LIST ——	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0205	POST ASSEMBLY 5" OD X 139"	1

**NOTE:** Hardware package(s) may include extra hardware

that is not necessary for this installation.

SPECIFICATIONS —
EMBLY 5" OD X 139": Assembly consisting of 5" OD
remised at all tubing 4/4" well aget alwaying age

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.

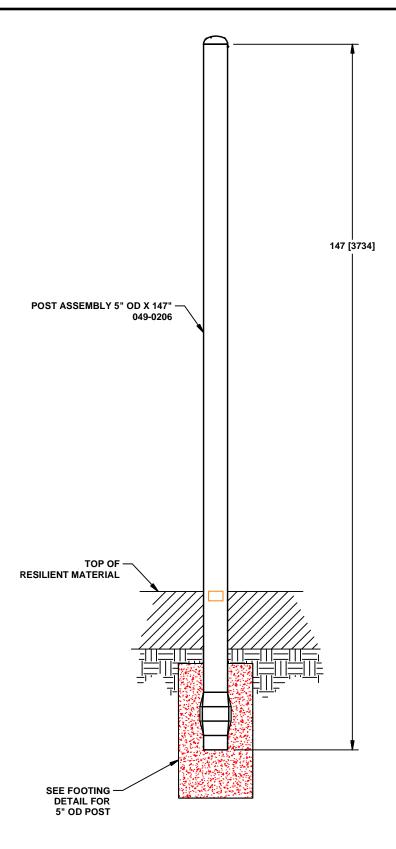
SHIPPING WEIGHT: 74 LBS.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

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 ———	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0206	POST ASSEMBLY 5" OD X 147"	1

### **SPECIFICATIONS**

POST ASSEMBLY 5" OD X 147": 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.

SHIPPING WEIGHT: 78 LBS.

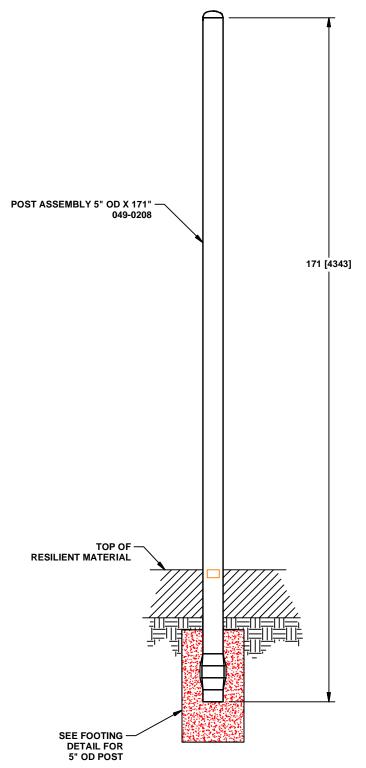
**NOTE:** Hardware package(s) may include extra hardware that is not necessary for this installation.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

670-0167 POST ASSEMBLY 5" OD X 147" REV: 02 PCN: 16-0257 12/5/2016





670-0169 POST ASSEMBLY 5" OD X 171"

	PARISLISI -	
PART NO.	DESCRIPTION	<u>QTY</u>
049-0208	POST ASSEMBLY 5" OD X 171"	1

**NOTE:** Hardware package(s) may include extra hardware

that is not necessary for this installation.

0. 20 1071110110
MBLY 5" OD X 171": Assembly consisting of 5" OD
anima di ata al trabina a 4/40 con la cast alconsidero anno

POST ASSE 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.

SPECIFICATIONS

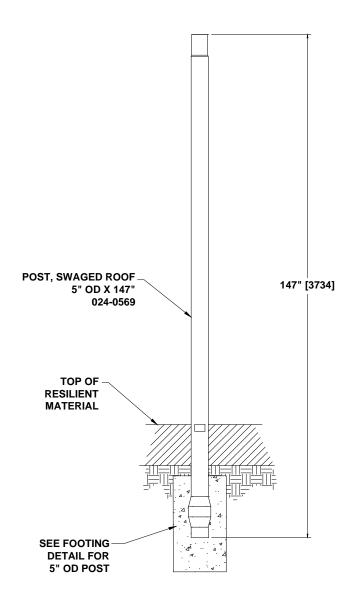
SHIPPING WEIGHT: 91 LBS.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5+OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and CPSC guidelines.

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"

# **PARTS LIST** PART NO. **DESCRIPTION QTY** 024-0569 POST, SWAGED ROOF 5"OD X 11GA X 147" coating. Note: Hardware package(s) may include extra hardware that is not necessary for this installation.

# SPECIFICATIONS

POST, SWAGED ROOF 5"OD X 11GA X 147": 5" OD x 11 GA galvanized steel tubing finished with a baked on powder

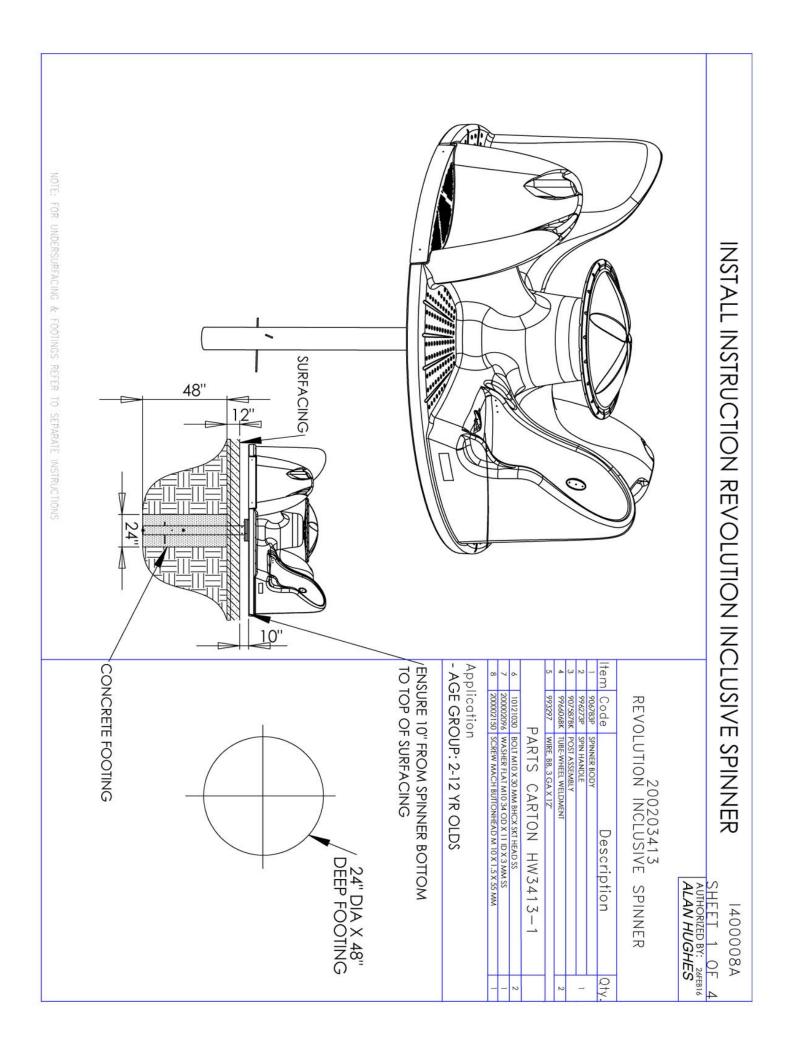
SHIPPING WEIGHT: 78 LBS.

# **INSTALLATION INSTRUCTIONS**

- 1. Determine 5" OD post location and dig footing hole as per typical concrete footing drawing, which is located in the preface of your installation manual.
- 2. Insert post into footing hole. Block-up and plumb post.
- 3. Pour concrete and let set 2 3 days.
- 4. Install resilient material in accordance to installation guidelines, ASTM standards and **CPSC** guidelines.

670-0172.doc Description: POST, SWAGED ROOF 5" OD X 147"

REV: 00 PCN: 14-0025 7/21/2014



# INSTALL INSTRUCTION REVOLUTION INCLUSIVE SPINNER

1400008A

SHEET 2 OF 2
AUTHORIZED BY: 26FEB
ALAN HUGHES

# BEFORE STARTING INSTALLATION OF YOUR LITTLE TIKESCOMMERCIAL PRODUCT PLEASE READ INSTRUCTIONS THOROUGHLY

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.

The site must be checked for adverse or unusual conditions. i.e.

- 1) Exposed, cracked or loose concrete footings.
- Worn, scattered or compressed surface material.
- Exposed roots, rocks or other environmental obstacles that form potential trip hazards
- Broken glass, refuse, or foreign objects around and on play equipment.
- Poor drainage areas.
- before digging. All sites especially those close to existing buildings must be checked for electrical or gas lines and drainage

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. 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," As the owner, it is most important that you are aware of your responsibility for the safe use of your new

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 guidelines and/or standards. work. Installation must be done to the manufacturer's assembly manual and applicable safety trimmed and peened smooth by the installer. Once your installation is complete, always inspect your All Little Tikes Commercial Play Systems playevents have been designed and engineered to meet all

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

CHILDREN SHOULD BE SUPERVISED WHILE PLAYING ON EQUIPMENT.

# INSTALL INSTRUCTION REVOLUTION INCLUSIVE SPINNER

DIG FOOTING AND SET POST ASSEMBLY 1. Dig one footing, 24" dia. x 48" deep.

140008A

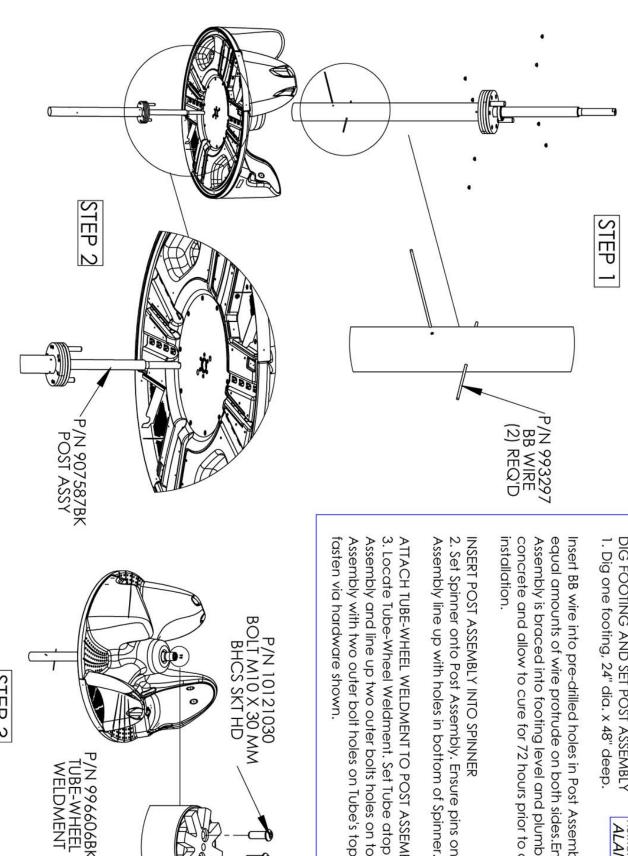
AUTHORIZED BY: 26FEB1

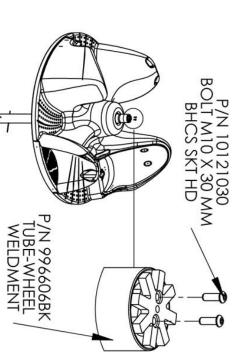
ALAN HUGHES SHFFT 3 OF 4

equal amounts of wire protrude on both sides. Ensure Post installation. concrete and allow to cure for 72 hours prior to completing Assembly is braced into footing level and plumb. Pour Insert BB wire into pre-drilled holes in Post Assembly. Ensure

2. Set Spinner onto Post Assembly. Ensure pins on Post **INSERT POST ASSEMBLY INTO SPINNER** 

ATTACH TUBE-WHEEL WELDMENT TO POST ASSEMBLY fasten via hardware shown. 3. Locate Tube-Wheel Weldment. Set Tube atop Post Assembly with two outer bolt holes on Tube's top. Securely Assembly and line up two outer bolts holes on top of Post





STEP 3

# INSTALL INSTRUCTION REVOLUTION INCLUSIVE SPINNER

STEP

ALAN HUGHES 140008A 4 OF



smoothly.

- If Spinner successfully and smoothly revolves 1 to 1 1/4 to next step. times before coming to a complete stop, move ahead
- complete stop, locate 6 recessed bolts on Post If Spinner revolves LESS than 1 time before coming to a clockwise 1/8th of a turn (45°) in all 6 recessed bolt Assembly (shown at left) and LOOSEN counter ocations.
- 1/8th of a turn (45°) in all 6 recessed bolt locations. Post Assembly (shown at left) and TIGHTEN clockwise coming to a complete stop, locate 6 recessed bolts on - If Spinner revolves MORE than 1 1/4 times before

P/N 200002096

P/N 200002150

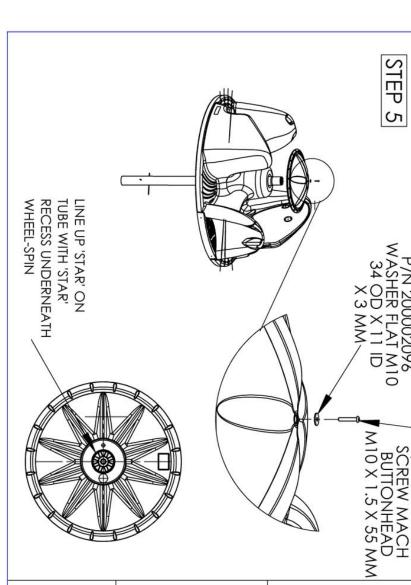
smooth operation. Retry spinning and continue to adjust as needed for

after installation depending upon usage NOTE: This test needs to be repeated every 3-6 months

# 5. ATTACH WHEEL-SPIN

set into recessed 'star' indentations on Wheel-Spin's on Tube correctly to create a cog-wheel effect. Fasten via underneath side. It is IMPORTANT that these line up Set Wheel-Spin atop Tube, ensuring 'star' arms on Tube hardware shown. Bolt will fasten into center bolt hole

labels onto Post Assembly where they can be easily protective surfacing. Apply Little Tikes and warning turns freely. If not, please refer back to Step 4. Install all Ensure all hardware is tightened. Turn Spinner, ensuring it



# 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.



Final Assembly

Miscellaneous Freestanding Play Equipment and Non-Play Equipment

# STEP 1

Plumb and level assemblies.

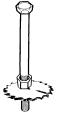
# STEP 2

Tighten all fasteners.



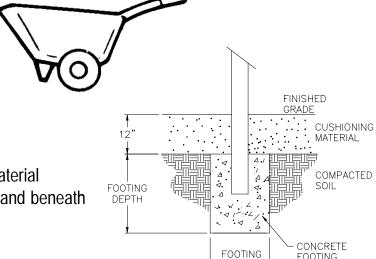
# STEP 3

Trim all bolts. No more than two (2) threads may protrude after trimming by installer. Peen ends smooth to touch.



# STEP 4

Pour concrete in remaining Footings, and allow 72 hours to cure.



DIA

# STEP 5

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.* 

# **FINAL STEP**

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



Rev. A



# **Product Specifications**

# Bug Bites® "C" Spring Rider - Buzzy

961



**Buzzy "C" Spring Rider** 

MODEL #: PRODUCT:
961 Buzzy "C" Spring Rider

GRND SPACE 3'-7" x 5'-0" CONCRETE: 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 bumble-bee.

Rider Body: The rider body shall consist of a Rockite 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 1-1/2" tube and/or of 2" x 2" x 1/4" angle, a cross member constructed of 1-1/4" pipe, handholds of 1" (1" O.D.) 15 ga. tube and/or Gator Grip, a cross brace of 3/4" x 1" oval tube and Gator Grip, 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 welded.

"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 5" tube, all solid welded.

Fasteners: All hardware shall be <u>Fastener style A</u>.

Finish: The Rockite 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 Mira-Cote™.

Consult the Glossary of Technical Data for Materials, Processes and Finishes of the underlined items.

# PLAYWORLD The world needs play.



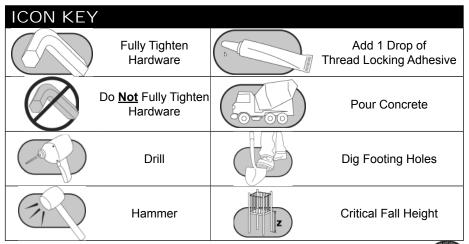
Assembly View

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

# 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** 

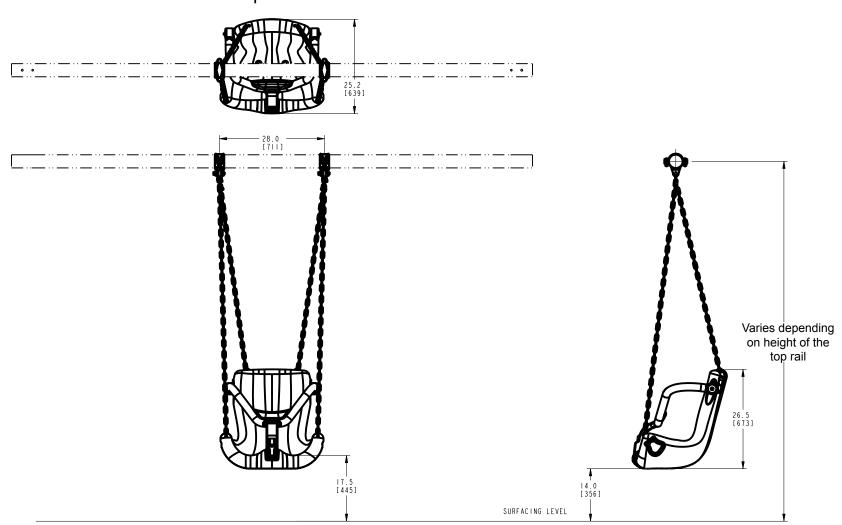
Recommended Crew:	One (1) adult
	0.5 man hour
Use Zone:	Refer to swing set instructions
	s): ASTM/CSA: 2-12, EN: 2-14



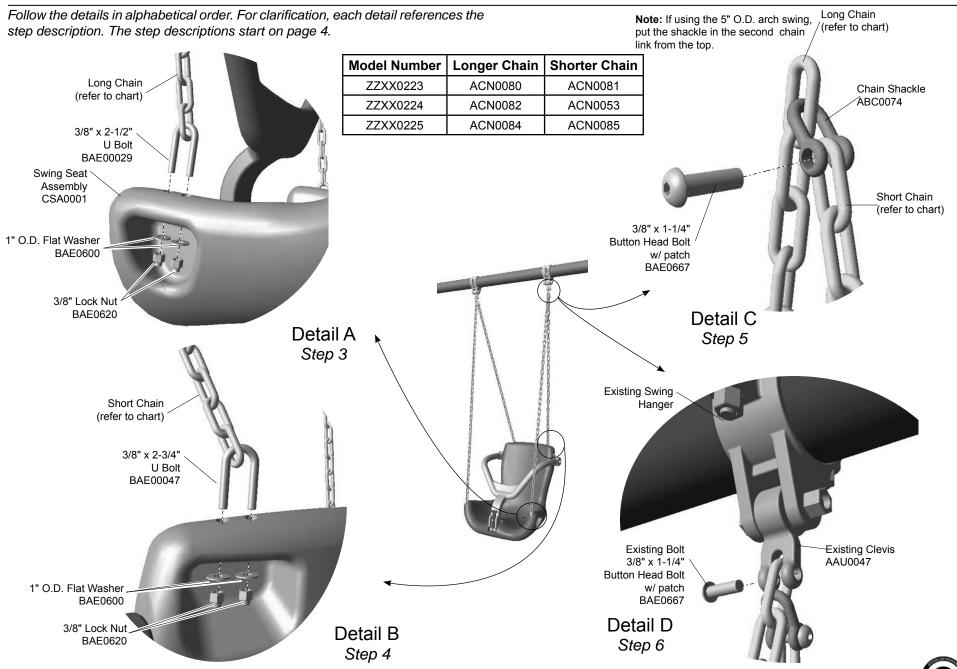
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0223	1240 mm	7 ft. (2135 mm)
ZZXX0224	1392 mm	8 ft. (2440 mm)
ZZXX0225	1697 mm	10 ft. (3050 mm)

Top View



**Elevation Views** 



\_\_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.

ZZXX0225 ECN2065

# 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:
   <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.

### **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 color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

To repair the 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.





# 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				P = Pass F = Fail
Inspect metal parts for structural and finish dam	nage.	Medium				NA = Not Applicable
Inspect for loose, missing, worn, or broken fast	eners.	High				
Inspect footing to insure support is secure and	footing is not damaged.	Low				
Inspect surfacing to insure proper depth and dis	stribution.	High				
Inspector: Name (Please Print)	Signature:				Da	- ate://
MAINTENANCE SCHEDULE						
Item in Question	Description of Problem		(	Correct	ive Action	Date
Repairer: Name (Please Print)	Signature:				Dat	e:/



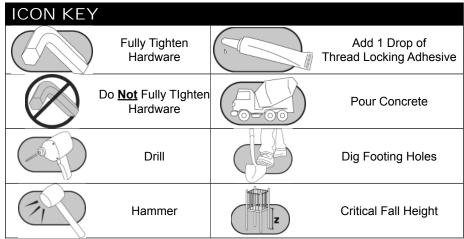


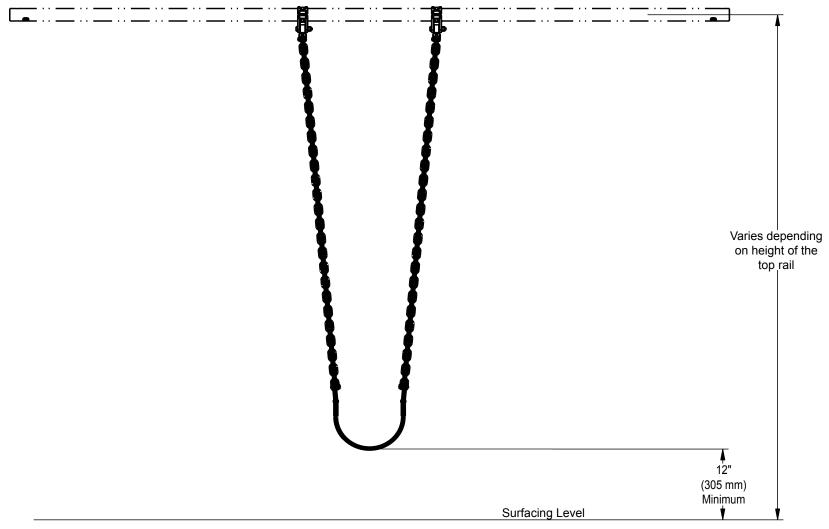
Refer to the Elevation View for the specific Critical Fall Height for the component.

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

**Installation Preparation** 

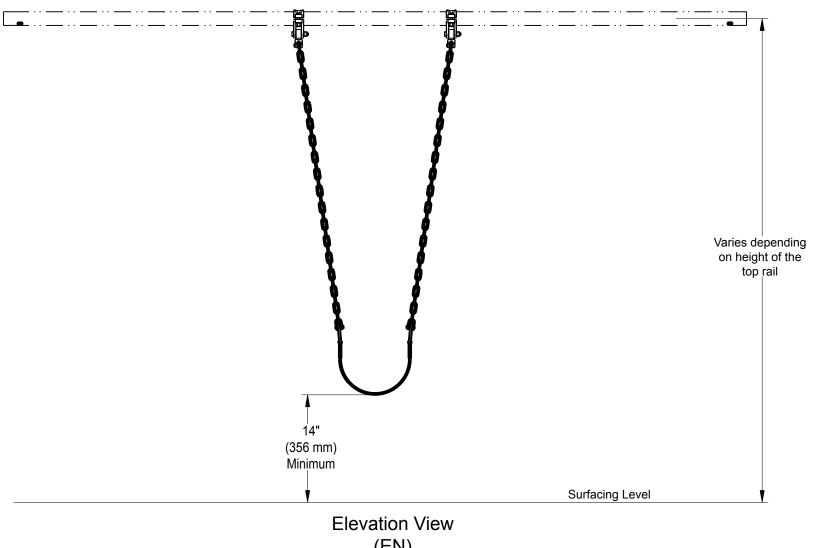
Recommended Crew:	One (1) adult
Installation Time:	0.25 hour
Use Zone:	Refer to the swing frame instructions
User Group Age (years	s): ASTM/CSA: 2-12, EN: 2-14





Elevation View (ASTM/CSA)

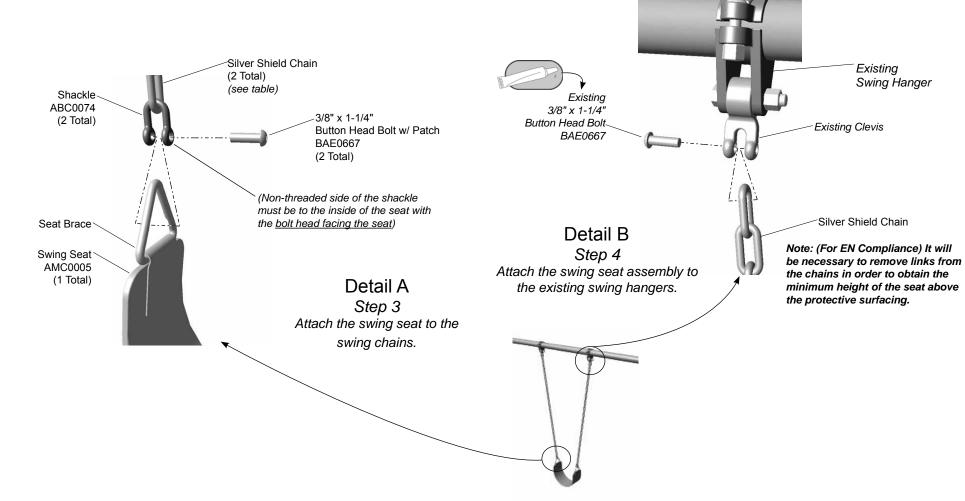
Model Number	Critical Fall Height - ASTM/CSA	Top Rail Height
ZZXX0324	7 ft. (2134 mm)	7 ft. (2134 mm)
ZZXX0260	8 ft. (2440 mm)	8 ft. (2440 mm)
ZZXX0261	10 ft. (3050 mm)	10 ft. (3050 mm)



(EN)

Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0324	1220 mm	7 ft. (2134 mm)
ZZXX0260	1370 mm	8 ft. (2440 mm)
ZZXX0261	1675 mm	10 ft. (3050 mm)

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



Model Number	Swing Chain Part No.	Top Rail Height
ZZXX0324	ACN0090	7 ft. (2134 mm)
ZZXX0260	ACN0091	8 ft. (2440 mm)
ZZXX0261	ACN0092	10 ft. (3050 mm)



Existing

Existing Clevis

Silver Shield Chain

Swing Hanger

**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

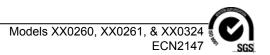
# ZZXX0260 - BELT SEAT WITH SWING CHAIN - 8 ft. (2438 mm) TOP RAIL HEIGHT

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





# **Inspection Form**

Page 8 of 8

- 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 dist	ribution.	High				P = Pass F = Fail
Inspect metal parts for structural and finish dama	ge.	Medium				NA = Not Applicable
Inspect for loose, missing, worn, or broken faster	ners.	High				
Inspector: Name (Please Print)	Signature:				Da	ate://
MAINTENANCE SCHEDULE						
Item in Question	Description of Problem			Correct	ive Action	Date
Repairer: Name (Please Print)	Signature:				Dat	e://





# Assembly View

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

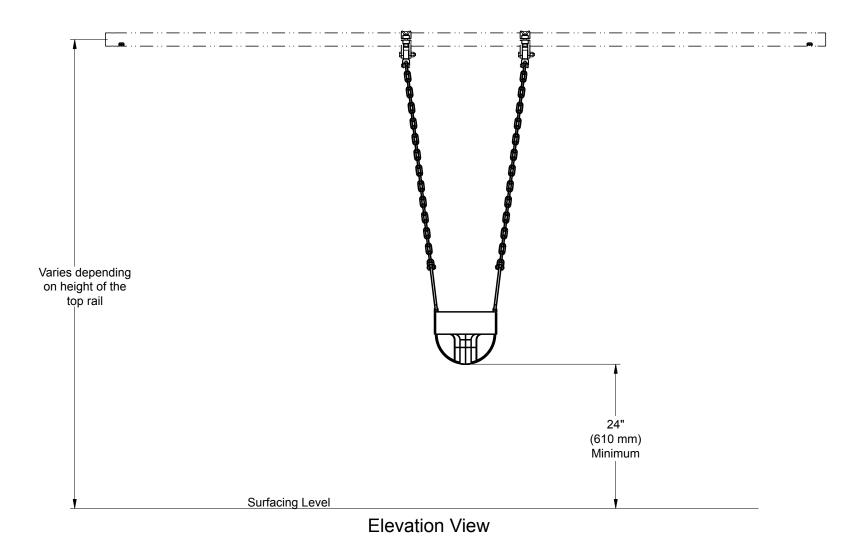
Model Number	Top Rail Height
ZZXX0325	7 ft. (2134 mm)
ZZXX0265	8 ft. (2440 mm)
ZZXX0266	10 ft. (3050 mm)

# Playworld Systems® 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

ICON KEY		
	Fully Tighten Hardware	

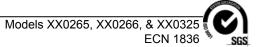


 Model Number
 Critical Fall Height - EN
 Top Rail Height

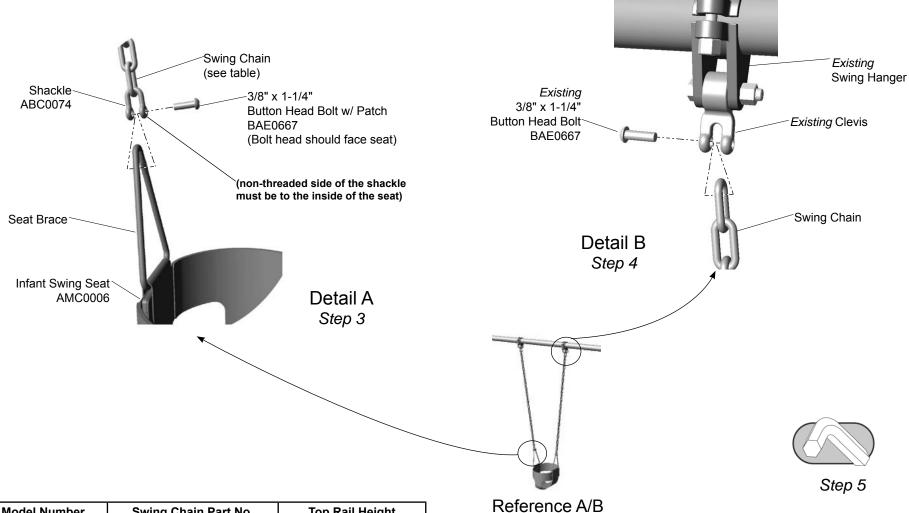
 ZZXX0325
 1345 mm
 7 ft. (2134 mm)

 ZZXX0265
 1525 mm
 8 ft. (2440 mm)

 ZZXX0266
 1830 mm
 10 ft. (3050 mm)



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



Model Number	Swing Chain Part No.	Top Rail Height
ZZXX0325	ACN0050	7 ft. (2134 mm)
ZZXX0265	ACN0040	8 ft. (2440 mm)
ZZXX0266	ACN0041	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.

# 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:
   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.

### **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®
Models XX0265, XX0266,
& XX0325
Infant Swing Seat with Swing
Chain





**570-522-9800** OUTSIDE U.S. 1000 Buffalo Road • Lewisburg, PA 17837 www.playworldsystems.com

# 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	Inspect Code	ion Date	Date Repairs Completed	
Inspect chain and swing seat for damage.		Medium				Inspection Cod
Inspect surfacing to insure proper depth and of	listribution.	High				P = Pass F = F
Inspect metal parts for structural and finish da	mage.	Medium				NA = Not Applical
Inspect for loose, missing, worn, or broken fas	steners.	High				
Inspector: Name (Please Print)	Signature:				Da	ate://
MAINTENANCE SCHEDULE						
Item in Question	Description of Problem		Co	orrect	ive Action	Date
Repairer: Name (Please Print)	Signature:	1			Dat	te:/
age 8 of 8				Ŋ	Models XX0265, X	(X0266, & XX0325



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)

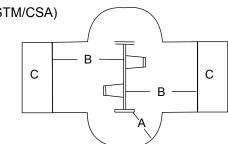
- For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. 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.

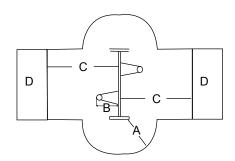
Infant Seat Swing Zones

**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)



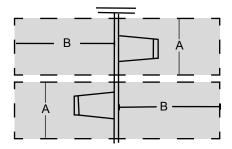
# (EN)

• 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 x Distance from pivot point to seat) + <u>either</u> 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.

Model XX0287

• The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. 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.

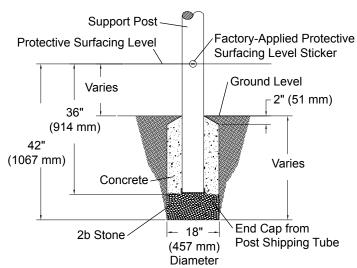
### **Maintenance**

• 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.

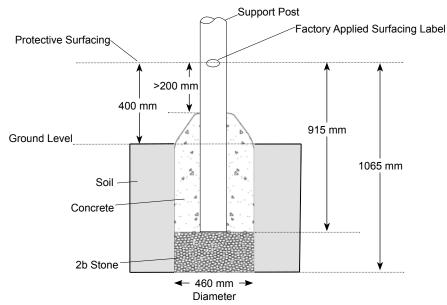
## **Supervision Guidelines**

- 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.

Model XX0287 ECN2147



Support Post Footing Detail (ASTM/CSA)



### **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.

Model XX0287 SGS

Footing Detail Support Post (EN)





Assembly View (representative model)

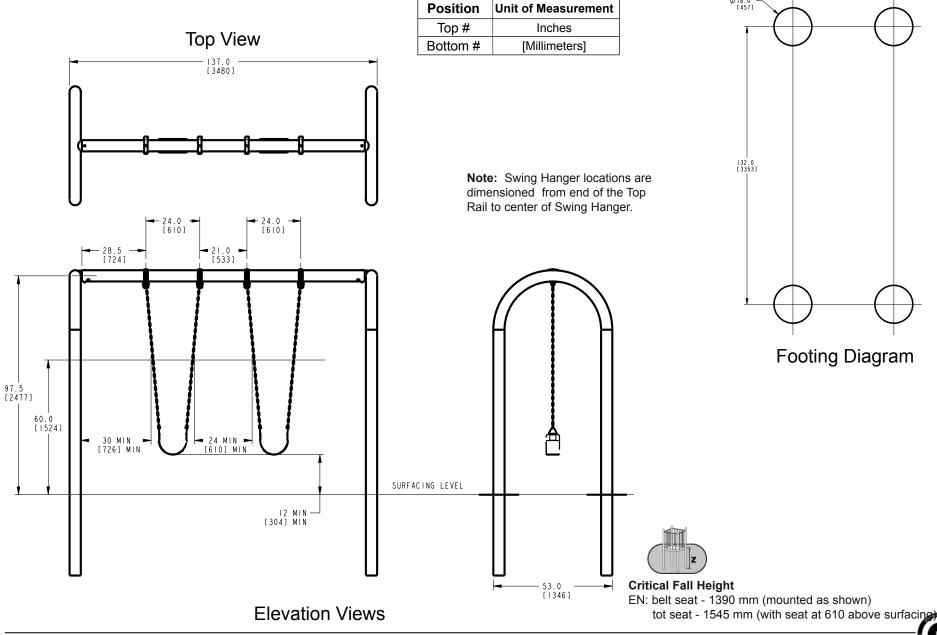
# Installation Instructions Playworld Systems® Model XX0287 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing 8 ft. (2438 mm) Top Rail

**Installation Preparation** 

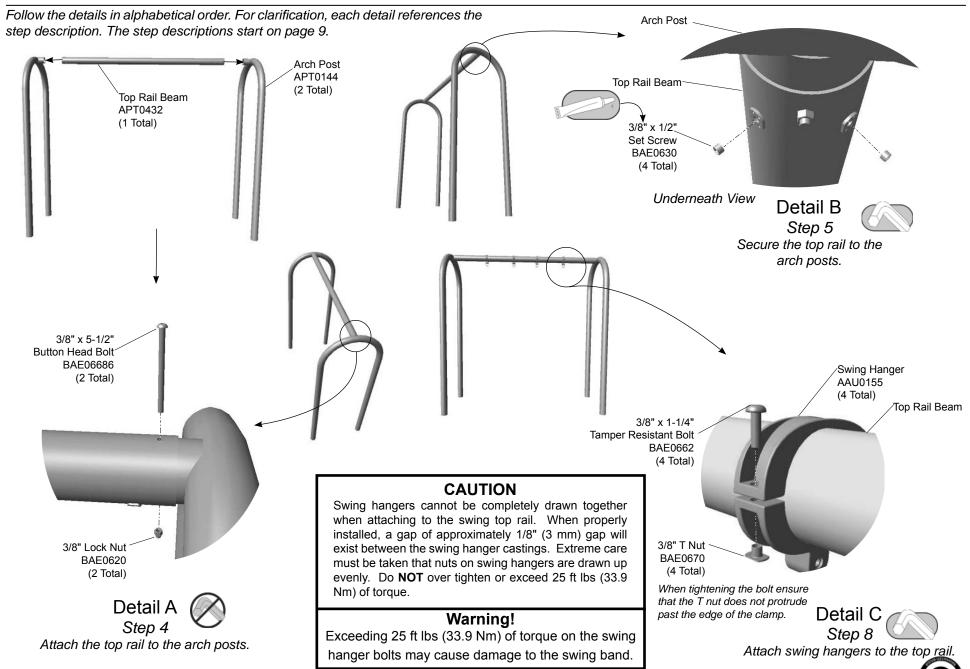
Recommended Crew:	Four (4) adults
Installation Time:	3 man-hours
Concrete Required:	0.48 cubic yard (0,37 cubic meters)
Use Zone:	Refer to Master Drawing
User Group Age (years):	ASTM/CSA: 2-12, EN: 2-14

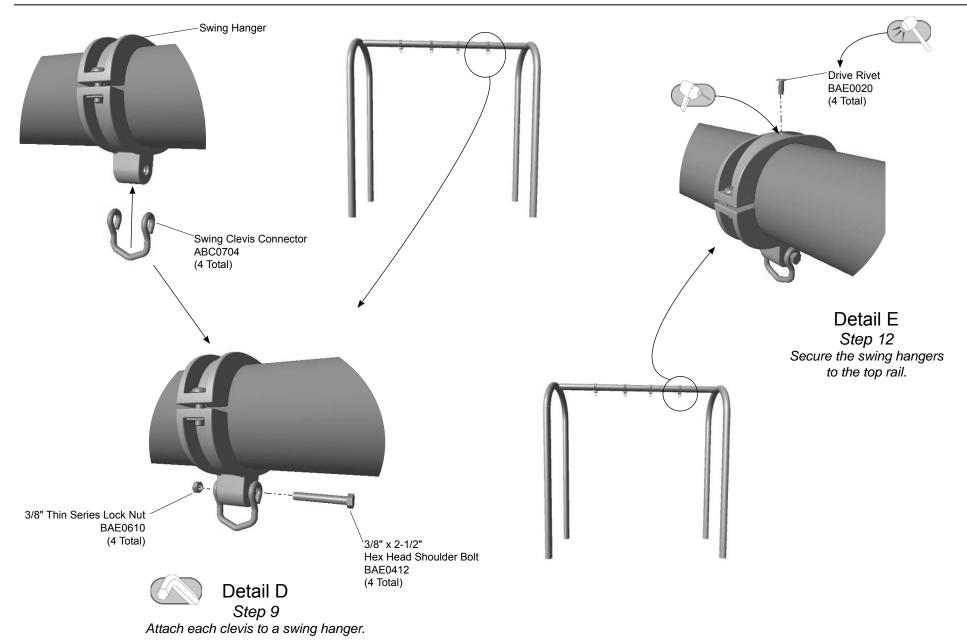
ICON KEY	,		
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do <b>Not</b> Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer	z	Critical Fall Height





KEY





Model XX0287 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.

Model XX0287

#### 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



For Customer Service, Call 800-233-8404 or

570-522-9800 OUTSIDE U.S.

1000 Buffalo Road • Lewisburg, PA 17837 www.playworldsystems.com



#### **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® 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.





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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:

<u>Bolts and Nuts:</u> 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 color-matching paint and allow to dry. Recoat area with color-matching 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® 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	ection Date	Date Repairs Completed	
Inspect surfacing to insure proper depth and dis	tribution.	High				Inspection Codes
Inspect swing hangers for tightness and damage	e.	High				P = Pass F = Fail
Inspect metal parts for structural and finish dama	age.	Medium				NA = Not Applicable
Inspect for loose, missing, worn, or broken faste	ners.	High				
Inspect footing to insure support is secure and for	ooting is not damaged.	Low				
						]
						]
Inspector: Name (Please Print)	Signature:				Da	- ate://
MAINTENANCE SCHEDULE						
Item in Question	Description of Problem			Correct	ive Action	Date
Repairer: Name (Please Print)	Signature:	I			Dat	e:/



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)

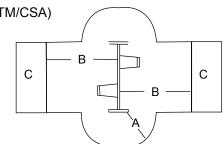
- For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. 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.

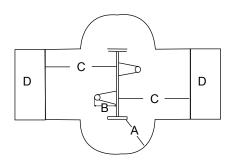
Infant Seat Swing Zones

**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)



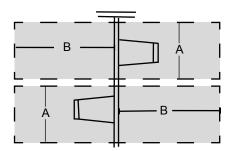
#### (EN)

• 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 x Distance from pivot point to seat) + <u>either</u> 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.

Model XX0370 ECN2147

• The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. 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.

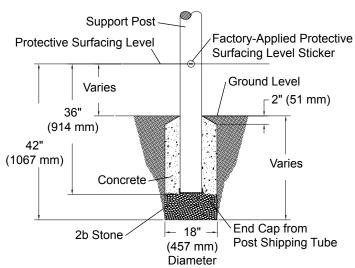
#### **Maintenance**

• 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.

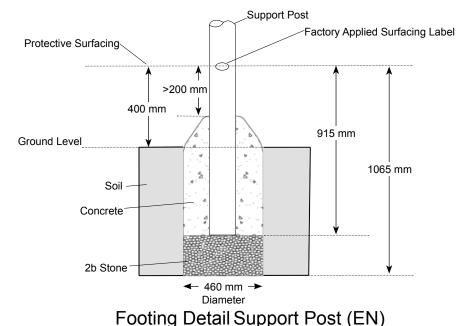
#### **Supervision Guidelines**

- 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.





# Support Post Footing Detail (ASTM/CSA)



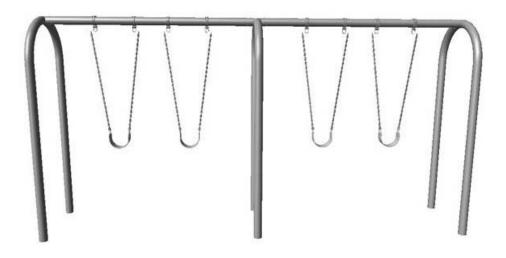
#### **FOOTING NOTES**

- 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.

Model XX0370 ECN2147



# Installation Instructions Playworld Systems® Model XX0370 5 in. (127 mm) O.D. Aluminum Arch Swing 2-Unit Add-A-Bay



Assembly View

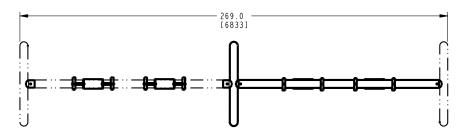
<u> </u>	
Recommended Crew:	. Three (3) adults
Installation Time:	. 2 man-hours
Concrete Required:	. 0.24 cubic yard (0,18 cubic meters)
Use Zone:	. Refer to Master Drawing
User Group Age (years):	. ASTM/CSA: 2-12, EN: 2-14

Installation Preparation

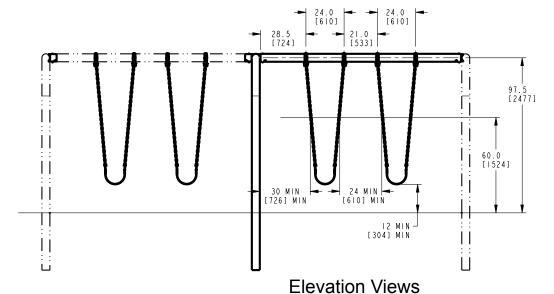
ICON KEY	,		
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do <b>Not</b> Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer	z	Critical Fall Height

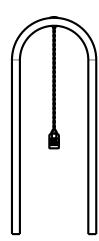
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

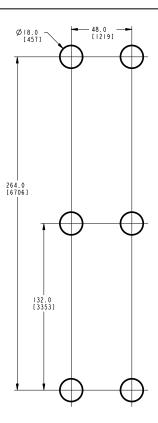
Top View



**Note:** Swing Hanger locations are dimensioned from end of the Top Rail to center of Swing Hanger.

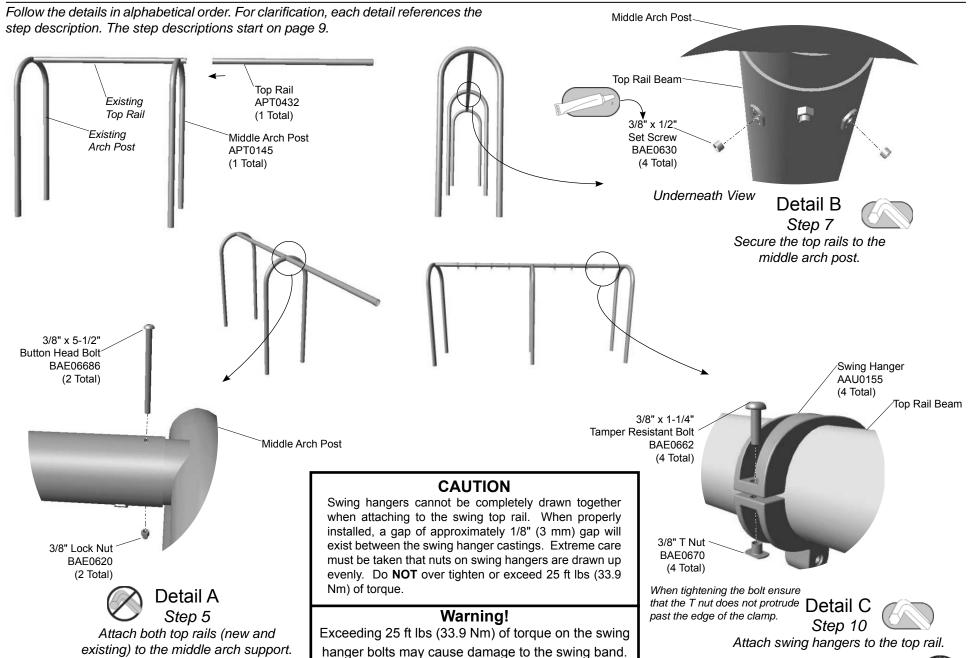


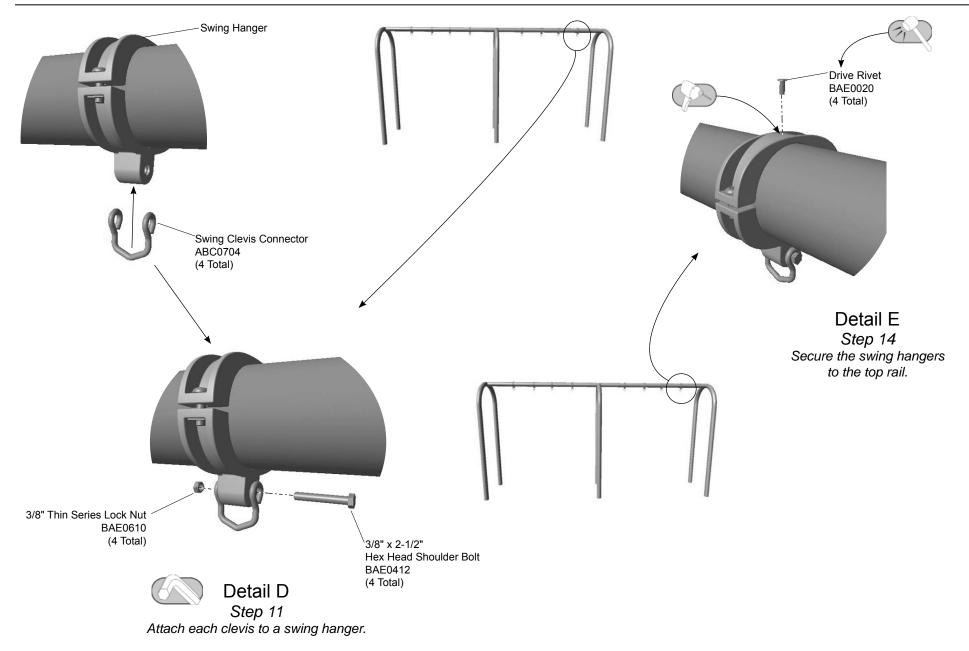




Footing Diagram







**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



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#### **FINAL INSPECTION**

- Playworld Systems® insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard for your area, appropriate for the fall height of each structure.
- Playworld Systems® strongly recommends close supervision of children as they play.
   The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the
  equipment and surrounding play area. A comprehensive maintenance and inspection
  schedule must be developed and all equipment inspected frequently. Refer to the
  inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
  - Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
  - Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
  - Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
  - 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® 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.



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:

<u>Bolts and Nuts:</u> 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 color-matching paint and allow to dry. Recoat area with color-matching 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.

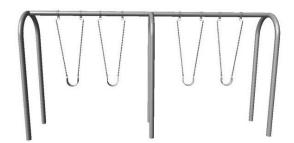
#### Surfacing

 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® 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!

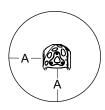
ECN2147

INSPECTION CHECKLIST		Frequency		ection Date	Date Repairs Completed	
Inspect surfacing to insure proper depth and o	listribution.	High				Inspection Codes
Inspect swing hangers for tightness and dama	ige.	High				P = Pass F = Fail
Inspect metal parts for structural and finish da	mage.	Medium				NA = Not Applicable
Inspect for loose, missing, worn, or broken fas	steners.	High				
Inspect footing to insure support is secure and	footing is not damaged.	Low				
Inspector: Name (Please Print)	Signature:				Da	J ate://
Item in Question	Description of Proble	m	Corrective Action			Date
Repairer: Name (Please Print)	Signature:	<u> </u>			Dat	e:/
age 14 of 14						Model XX0370

# PLAYWORLD The world needs play."



Assembly View

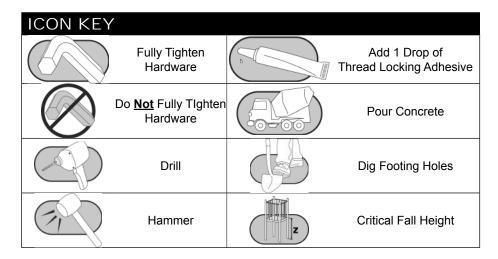


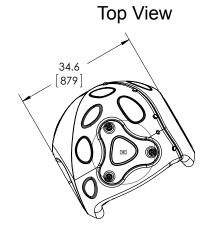
Equipment Use Zone
A - (ASTM) 72 in. (1830 mm)
(CSA) 1800 mm
(EN) 2000 mm

# Installation Instructions Playworld Systems® Model XX0483 Cozy Cocoon Spinning Post Mount

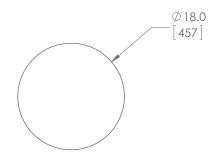
**Installation Preparation** 

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

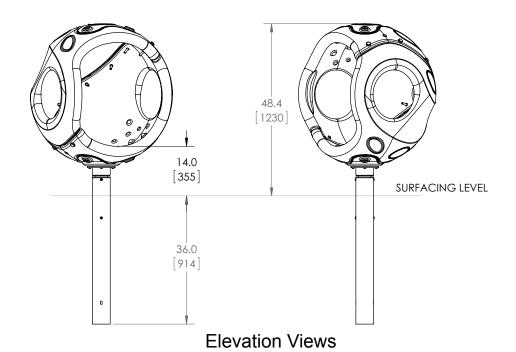


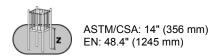


KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



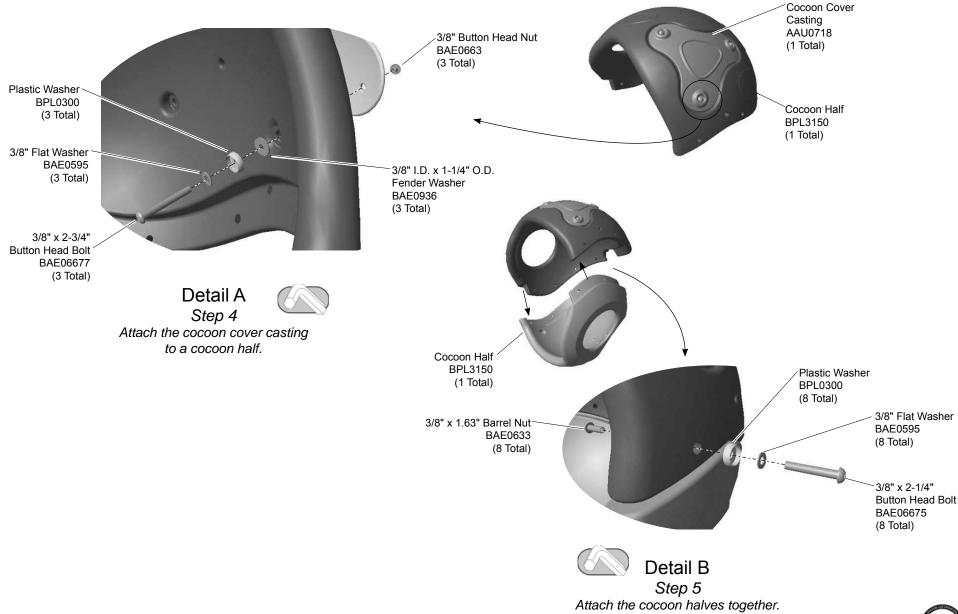
Footing Diagram



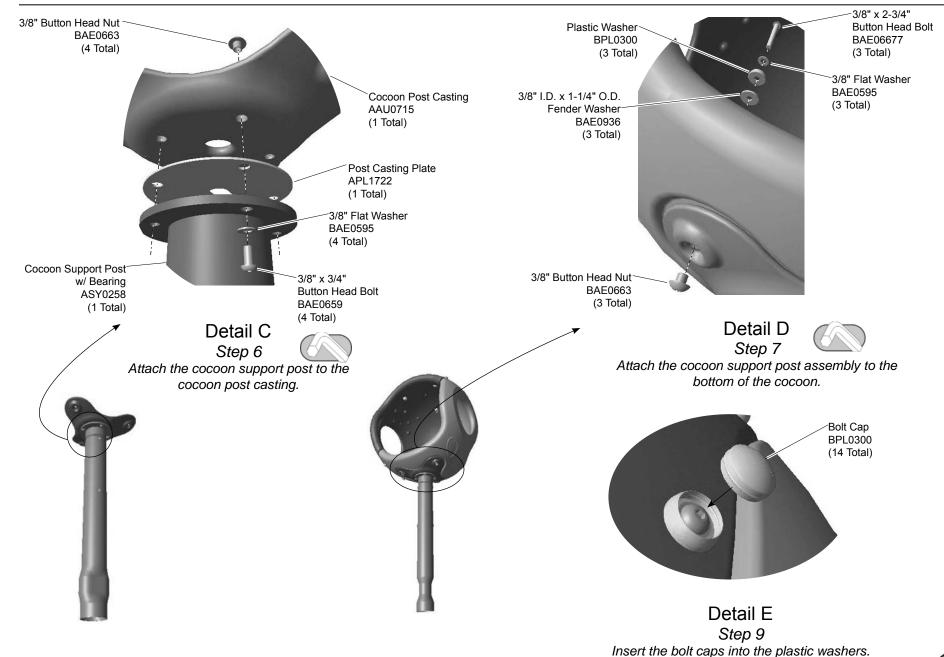




Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Model XX0483 PA1380



Model XX0483 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 F** 

**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.

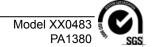
#### **XX0483 - COZY COCOON SPINNING POST MOUNT**

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



For Customer Service, Call 800-233-8404 or 570-522-9800 outside us

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#### **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.

#### **Plastic Parts**

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

#### **Castings**

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

#### Welds

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

#### **Finish**

· Inspect metal parts for finish damage.

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

#### **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® Model XX0483 Cozy Cocoon Spinning Post Mount





Model XX0483 PA1380

# Inspection Form

Page 8 of 8

- 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				P = Pass F = Fail
Inspect metal parts for structural and finish damage.		Medium				NA = Not Applicable
Inspect surfacing to insure proper depth and distribution.		High				
Inspect footing to insure support is secure and footing is not damaged.		Low				
						_
Inspector: Name (Please Print)	Signature:				Da	ate://
Item in Question	Description of Problem		Corrective Action			Date
Repairer: Name (Please Print)	Signature:				Dat	te:/



# **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, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. Critical fall heights for Europe and Canadian compliance shall be listed on the elevation page or master structure drawing if they differ from the ASTM standard. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

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

#### Maintenance

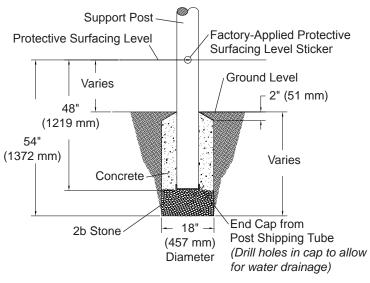
• Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, a comprehensive maintenance program must be developed for each playground and strictly followed. All equipment must be inspected frequently for any potential hazards. Special attention must 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**

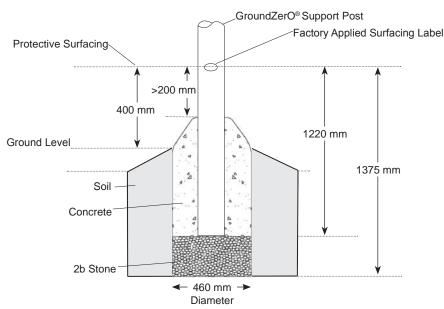
- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use 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.

of 6 SGS

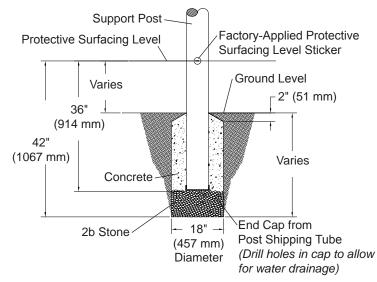
# **Footing Details (in ground)**



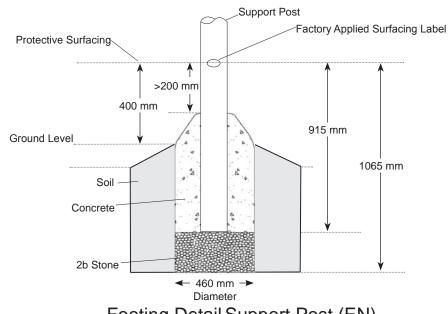
# GroundZerO® Support Post Footing Detail ASTM/CSA



Footing Detail GroundZerO® Support Post (EN)



Support Post Footing Detail (ASTM/CSA)



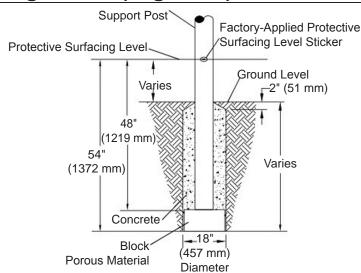
Footing Detail Support Post (EN)

Annex Page 3 of 6

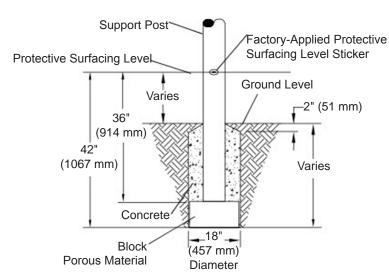
**Guidelines & Information (fs RPE)** 

# **Footing Details (in ground)**

# Footing Notes



# GroundZerO® Support Post Footing Detail ASTM/CSA Block Option



Support Post Footing Detail (ASTM/CSA)
Block Option

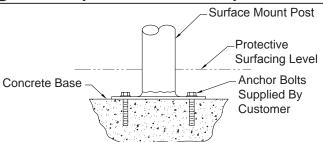
#### **FOOTING NOTES (IN GROUND)**

- 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® 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)**



Surface Mount Footing Detail

# **Footing Notes**

#### **FOOTING NOTES (SURFACE MOUNT)**

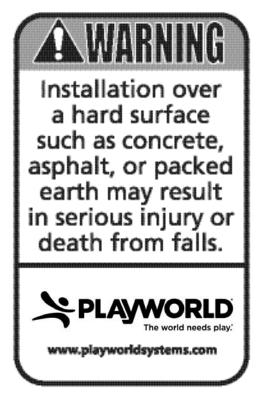
- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If the play equipment is installed on uneven terrain, maintain support post mark for the protective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

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



**Surfacing Warning Label**