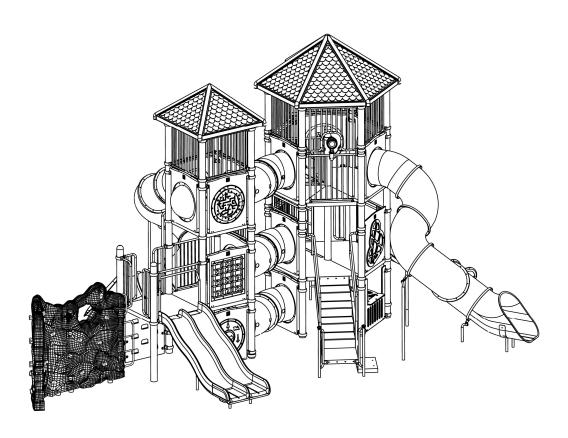


IMPORTANT! This manual contains maintenance, safety and repair information



WARNING: Read this manual thoroughly before installation. Improper assembled or maintained playground equipment can present a serious safety hazard. Impact attenuating surfacing is required under and around all playground equipment and must be maintained.

For replacement parts, additional maintenance supplies or information, please contact your Playcraft representative or customer service at:

Playcraft Systems • 123 North Valley Drive • Grants Pass, OR 97526 Tel: 541-955-9199 Fax: 541-955-6130

IMPORTANT INFORMATION

Please Save This Document. Do Not Discard or Destroy. Keep all instructions, specifications, drawings, packing lists and bills of material, plus these Maintenance Guidelines in a permanent file for future reference. Packing and parts lists will be required when ordering replacement parts.

Read This Document First

Prior to performing required maintenance on any play structures or play accessories supplied by Playcraft Systems, it is imperative that this document be read and fully understood by all persons responsible for maintaining your new playground equipment.

Introduction

You have purchased some of the finest commercial playground equipment available. It is built to exacting production standards using the finest materials available.

Playcraft Systems is ready to serve you when you need replacement parts and/or additional products. We welcome your input. Listening to our customers and specifiers has been instrumental in helping us set high industry standards and has contributed to our continually improving product lines.

Owner's Responsibility

The Site

Excellent playground equipment is only one part of the total playground equation – environment plus equipment equals a playground. The best equipment poorly sited, carelessly installed, or improperly maintained can result in an unsafe playground. Therefore, before you install your new playground equipment, we urge you to carefully review your plans for the site and consider the following important questions:

- 1. Will the equipment be visible and accessible to the public?
- 2. Will it be clearly separated from streets, bike paths and playing fields?
- 3. Will the area include benches to encourage adult supervision?
- 4. Will litter receptacles be close by so trash can be contained?

These and other factors that can impact the safety of the play experience are presented in this document.

Safety Surfacing

WARNING! You MUST install and maintain appropriate impact attenuating safety surfacing material under and around all playground equipment.

We sincerely mean exactly what this warning states. Do not consider placing any play equipment over unforgiving materials such as concrete, asphalt, grass, or compacted earth. No other single factor effects playground safety as does the correct selection, installation, and maintenance of energy absorbing playground surfacing materials.

Surfacing Material and Equipment Installation by Others

Playcraft Systems does <u>not</u> supply safety surfacing material nor do we provide equipment installation services. Whether installed by the owner or by an independent contractor, it is the owner's responsibility to insure that the site and surface are properly prepared, and that all equipment is correctly and safely installed.

Preventive Maintenance

The playground site, the safety surfacing, and the playground equipment itself will require conscientious periodic maintenance. A carefully planned and implemented preventative maintenance program will not

only protect your investment and prolong equipment life, but also, and most important, it will reduce the potential for serious accidents and injuries.

SCAN HERE FOR



MSDS INFORMATION

Risk Management

Liability exposure concerns us all. Your role in decreasing this exposure begins with careful site selection, proper play surface preparation, and correct equipment installation. Once your playground is put into service your obligation continues with an ongoing maintenance program.

In-service training of your maintenance staff, a systematic and documented program for inspection of the site and equipment, procedures for immediate maintenance and repair, plus meaningful recordkeeping are indispensable steps in providing a safe playground environment for the users.

WARNING! If you feel for any reason that any part of your playground, equipment, or surfacing, is unsafe, do not allow access to the playground until your concern for safe play has been satisfied.

Safety Inspection Forms / Maintenance Checklist

If you do not have a systematic playground inspection program now in place, we encourage you to start one. You can use the suggested Playground Maintenance Safety Inspection Forms which accompany this manual as a basis, or you can develop your own. Later in this document we also provide examples of product specific maintenance check lists that should be included on your inspection forms.

Project: C & C Reference material on playground safety including performance standards for equipment and loose fill ground cover can be found in the following publications.

ASTM (These publications are not free)



The American Society for Testing and Materials (ASTM), has published two related voluntary standards.

Standard F-1292 is entitled Standard Specifications for Impact Attenuation Systems Under and Around Playground Equipment. Standard F-1487 is entitled Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.

For copies of these publications contact: **ASTM Customer Service** 1915 Race Street Philadelphia, PA 19103 Telephone 215-299-5585

CPSC Handbook for Playground Safety (This publication is free)



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

or Call Toll Free Hot-Line 1-800-638-2772 or Visit the CPSC web site at www.cpsc.gov

Safety Surfacing

Falling onto a hard surface has always been the most frequent cause of severe playground injuries, and while the U.S. Consumer Product Safety Commission (CPSC) strongly supports safety surfacing, it has stopped short of banning unforgiving surfaces, The choice of surfacing materials is the primary factor in playground safety, and is solely the responsibility of the playground owner.

The CPSC Handbook includes an appendix entitled, "Summary Characteristics of Organic and Inorganic Loose Fill Materials, and Unitary Synthetic materials". It presents an evaluation of the fall absorbing characteristics of several commonly used safety surfacing materials (i.e. wood chips, bark mulch, sand, pea gravel, shredded rubber, rubber matting, etc,).

This appendix also deals with the advantages and disadvantages of each surface material, including installation and maintenance requirements. All safety surfacing materials will require maintenance. We urge you to seek professional guidance in evaluating safety surfacing for your particular application.

Safety Surfacing (Continued)

Climate, supervision, budget, and maintenance considerations can each be a factor for choosing the correct material for your site. Safety surfacing materials must be maintained at a depth or thickness sufficient to meet ASTM Standard F-1292, "Standard Specification for Impact Attenuation Systems Under and Around Playground Equipment." This standard provides criteria for measuring the force absorbed by a playground surface when an object falls on it from a specified height.

If you select a loose-fill safety surfacing, be sure that the retaining walls or walkways are properly designed to keep the material in place and at the recommended depth. To avoid creating a tripping hazard, edging material should be made obviously visible to the user. Be aware that potholes at the base of slides and under swings may need to be filled on a daily basis.

Use Zones

The CPSC Handbook states that an appropriately wide and unobstructed safety perimeter, covered with forgiving material, must always surround all play equipment. The guidelines generally recommend a minimum six-foot fall zone around all sides of the equipment. Review your plans carefully. Be sure your site's fall zone is adequate; if in doubt, err on the side of safety. Eight to ten feet of unobstructed space between the equipment and the playground perimeter may not be excessive around high decks or moving equipment. Allow additional space around "to-fro" swings and such other accessories as Bouncers, Track Rides, Arch Climbers, and any equipment from which children might be tempted to leap. Swings and other stand-alone pieces should be installed away from primary traffic patterns. If your playground includes smaller-scaled equipment for preschool play, locate this equipment at a sufficient distance from the older children's play area to minimize potential social conflicts.

Concrete Footings

Verify that concrete footings are poured in such a way that they will not become exposed. All concrete footings should be a minimum of six inches below construction grade, and twelve to eighteen inches below the top of any loose safety surfacing material. Seek expert advice on footing designs, particularly if you are building the playground at a site affected by expansive or poor soil conditions, or by climatic extremes. For instance, in cold climates, footings must extend below the frost line to prevent the soil from heaving or twisting the structure.

Soil Drainage

Confirm the soil's drainage capacity. Sites with a history of drainage problems may require the installation of dry wells, French drains or leach lines.

Another option is to build the structure above grade (with low retaining walls containing the safety surfacing material) to ensure maximum drainage. To aid drainage and reduce the settlement of loose surfacing material, many playgrounds are installed over a construction grade base of compacted washed gravel laid beneath filter fabric and the safety surfacing.

Other Site Considerations

WARNING! Metal playing surfaces can become dangerously hot when exposed to direct sunlight. Owners/operators must warm users that serious thermal bums may result when bare skin comes in contact with hot metal.

Track the sun's path over the apparatus in all seasons and keep in mind that hot metal surfaces are known to cause thermal bums in hot climates. Generally, in North America, to avoid the direct rays of the afternoon sun, orient non-shaded metal surfaces toward the North or East.

While a shaded playground is often desirable, always check the site for overhanging tree limbs that might invite climbing. Prune all dead wood out of the trees located in the vicinity of the playground.

Inspection After Installation

The following inspection steps should be taken immediately following the installation of play equipment.

- Check to see that each concrete footing meets all specifications.
- Compare the "as-built" structure with the manufacture's drawings and specifications to verify that the installer did not deviate from the assembly and installation instructions.
- Make sure timber posts have been installed with the processed (incised ends down).
- Verify that all metal collars are correctly pinned and are firmly against the metal posts and that all connectors and bolts are in place and secure.
- Make sure that all S-hooks are tightly closed.
- Check all metal parts for sharp edges or burrs created during the installation process and smooth as required.
- Inspect all openings on play structure for potential entrapment hazard following U.S. CPSC Guidelines (i.e., no openings between 3-1/2" and 9").
- Observe initial play patterns to identify and rectify any player traffic conflicts which I could lead to future injury.
 - Retain all documentation received with the equipment including installation instructions, drawings,
- packing lists, bills of material, invoice, and order confirmation, in permanent record. These will be required to receive future service from the factory.

Maintenance Overview

Training and Monitoring Staff

The following steps should be taken to ensure a quality maintenance program.

- Educate employees about the seriousness of playground safety.
- Use preprinted forms to ensure thoroughness of each inspection and to document your commitment to playground safety.
 - After each inspection review the completed forms. Check and confirm that each item that was NOT
- checked "OK" was either fixed on the spot or that the problem was carefully documented for repair on a Work Order.
- Establish firm policies concerning the time frame allowed for Work Order repairs to be completed before requiring that play equipment be removed from service.
- Establish a method for reporting a hazardous condition and for quickly remedying the situation before an accident can occur.
- Provide a method of documenting the cause of any injury accident. Keep a permanent record of all playground injuries which have been reported.
- Develop a monitoring system to evaluate the equipment for misuse or unintended use.
- Investigate the frequency and nature of damage and/or vandalism and take corrective action.
- Provide periodic in-service training for all maintenance staff.
- Consider employing a knowledgeable independent expert to review the adequacy of the safety inspections, documentation procedures and the overall maintenance program.

Scheduling Maintenance

The following periodic steps should be taken to maintain a quality maintenance program.

- Assign a maintenance person to regularly visit the site to clean and monitor and report any safety problems, vandalism, or changes in the condition of the safety surfacing.

 Establish a schedule for periodic maintenance inspections. These detailed, systematic safety
- inspections should occur at least monthly, weekly, or even twice-weekly depending on the amount of usage. More frequent detailed inspections are appropriate at heavily used facilities and at peak activity periods.
- Signage with clearly marked applicable playground rules of use should be posted. This signage
- should also include a number and contact person for reporting any questions or concerns users may have at the site.
- Assign someone with a personal knowledge of the activity patterns at the playground to determine the most appropriate inspection frequency.

Scheduling Maintenance (Continued)

Monitor changing patterns of use and/or changing site and equipment conditions. Be prepared to increase routine safety inspections as required. Expect the frequency of more detailed playground inspections to vary due to changes of season, climate, history of vandalism, intensity of use, type of equipment and behavioral patterns of the playground users.

Tools Required for Proper Maintenance

- Keep all tools needed to tighten bolts, screws and other connecting hardware and files readily accessible to the playground supervisor.
- Provide maintenance staff with appropriate tools for cleaning the safety surface, structures, and walkways.
- Provide a safe ladder for inspecting high placed items such as swing assemblies and roof structures.
- Furnish a lubricating gun and weather resistant lubricants for use in maintaining bearings in moving components on the playground.
- Store an adequate supply of safety surfacing material nearby for prompt replenishment of the playground site and for filling "pot-holes" as required.

Frequency of Playground Inspections

The optimum frequency of inspections for a specific playground will vary with intensity of usage, available supervision, age of the players, vandalism history, seasonal or weather changes and the age and condition of the play equipment. Only someone very familiar with the site should determine how often inspections should take place.

As a general rule, someone should be assigned to routinely (usually daily) inspect the playground looking for any obvious problems. Detailed inspections should be scheduled, periodically (every other day, twice a week, weekly, biweekly, or monthly) based upon the factors noted above and any historical patterns that have been observed.

Inspection & Repair Forms

Creating Safety inspection and Repair Work Order Forms

We have included with this manual a separate sheet illustrating sample Playground Maintenance Safety Inspection Forms. You may photocopy these forms for use by your maintenance staff in performing periodic inspections of your equipment. Or, you may wish to create your own forms. In either case, the playground owner should do the following:

- Establish a simple written form for daily maintenance inspections. Use the sample Daily Playground Maintenance Safety Inspection Form included with these guidelines as a starting point.
- Establish forms for periodic playground safety inspections (weekly, bi-weekly, or monthly). Select appropriate (product-specific) topics relating to your equipment from the Suggested Periodic Playground Maintenance Safety Inspection Points that are listed starting on page 7. Include inspection points for the site, the structure, and every accessory on the playground. If an accessory appears more than once (two Arch Climbers, for example), number the duplicate accessories and provide a space for the inspection of each item. When developing your forms, include other items that may be unique to your site or pertinent to local or state requirements.
- Establish a Playground Equipment Maintenance Work Order Form for your maintenance staff to till out if a problem is noted that cannot be fixed when discovered., The Work Order Form should be attached to either the daily or periodic inspection checklist for follow up maintenance.
- Instruct the playground inspector to deliver a copy of the Work Order Form to the appropriate maintenance manager or outside contractor.

WARNING: If you feel for any reason that any part of your playground, equipment, or surfacing, is unsafe, do not allow access to the playground until your concern for safe play has been satisfied.

Inspection Points

Suggested DAILY Playground Maintenance Safety Inspection Points

The Site

- The safety surfacing material is clean and free of debris and is suitable for play.
- If the safety surfacing material is loose fill, check for rocks, tree roots, animal feces, glass, nails, food containers and other trash above and below grade.
- Safety surfacing material is smooth and being maintained at its minimum required depth of inches.
- If safety matting is used, it is secure and free of voids.
- "Potholes" in loose Fill material at the end of slides and beneath swings have been filled.
- Area is free of standing water.
- Trees are pruned properly and cleared of dead wood.
- No insect or animal nests have been detected.
- Walkways around the play area have been swept.
- All litter is confined to containers.

The Structure

- Playing surfaces have been inspected for foreign objects such as razor blades, broken glass, needles, broken parts, damage from tire, removal of hardware or other vandalism.
- All rails, steps, rungs, seats and their respective attachment hardware are secure and intact.
- No ropes or strings have been attached to equipment.

Suggested PERIODIC Playground Maintenance Safety Inspection Points

The Site

- Daily maintenance has been adequate for keeping the surface clean and free of depressions ("pot holes") under high impact areas (slides, swings, etc.)
- Daily maintenance personnel are keeping safety surfacing replenished to maintain a constant, required depth.
- Nearby trees are cut back and pruned of dead wood.
- Site drainage is functioning properly.

The Structure

- The structure has been inspected for stability and overall integrity.
- All wood and metal post bottoms have been carefully inspected for integrity at the ground line or concrete footing contact points.
- The structure has been checked for deterioration, wear and vandalism.
- No component parts are missing or broken.
- All nuts, bolts and set screws were inspected and remain in place and secure.
- No nuts, bolts or screws are exposed.
- All caps and plugs are in place.
- No concrete footings are exposed.
- All socket and collar connections are intact and secure.

Metal Surfaces

- Metal surfaces are smooth, with no sharp protrusions.
- Metal shows no signs of unacceptable wear or vandalism.
- Water is not collecting on deck surface.
- Corrosion is not present.

Inspection Points (Continued)

Plastic Surfaces

- Plastic surfaces are smooth, with no sharp protrusions.
- Plastic shows no signs of unacceptable wear or vandalism.

Protective Barriers

Wire Mesh Wall Panels or Steel Pipe Walls

- Connecting hardware is secure and intact.
- All welded connections are sound.
- Corrosion is not present.

Graphic Panels

Panel attachment hardware is in place and secure.

Mirror Panels

- Panel attachment hardware is in place and secure.
- Stainless steel mirror is firmly attached to panel.

Moving Accessories

Please note: Because moving accessories require more attention than stationary accessories, you may choose to incorporate items for a detailed inspection of moving equipment into a separate, more frequent schedule.

Belt and/or Toddler Swings

- Safety surfacing material around and beneath swing is acceptable.
- All connection hardware is in place and secure.
- Swing hanger bushings have been inspected for unacceptable wear and/or in good working order.
- Chain link bearing points have been inspected for integrity and contain at least 75% of original steel.
- Upper and lower S-hooks are tightly closed and have been inspected for integrity.
- Rubber seats are not split, and internal metal reinforcements are not exposed.
- Seats are at _____ inches elevation (proper elevations for each type of swing are specified in installation drawings) above safety surfacing material.
- Corrosion is not present.

Tire Swing

- Safety surfacing material around and beneath swing path is acceptable.
- All connection hardware is in place and secure.
- Mounting bracket has been inspected for unacceptable wear and is securely fastened.
- Tire when positioned and extended toward support posts, clears post by 30 inches or more.
 (Refer to CPSC guidelines)
- Bottom of tire is at 15 inches above safety surfacing material when tire is hanging freely.
- Swivel Assembly is fully lubricated with heavy-duty bearing grease.
- Swivel Assembly is in good working order and shows no signs of unacceptable wear.
- Rubber boot is intact and appropriately covers moving parts preventing exposure of bearings to dirt and dust.
- Upper chain connectors are secure and show no signs of unacceptable wear.
- Chain link bearing connection points have been inspected for integrity and contain at least 75% of original steel.
- Link connections to tire eye bolts are intact, secure and show no sign of unacceptable wear.
- Attachment hardware is tightly mounted to tire assembly.
- Tire and assembly are intact and in good condition.
- Corrosion is not present

Moving Accessories (Continued)

Track Ride

- Safety surfacing material around and beneath Track Ride path is acceptable.
- Supporting beam is firmly attached to structural supports.
- All attachment hardware is in place and secure.
- Track is free of obstructions and foreign objects and bearings of track assembly roll freely from one end of track to the other.
- Bearings of track assembly are fully lubricated with heavy-duty bearing grease and roll freely.
- Rubber bumpers located at each end of the track and track assembly are intact and working properly.
- Corrosion is not present.

Ring Traverse

- Safety surfacing material around and beneath Ring Traverse path is acceptable.
- All attachment hardware is in place and secure.
- Each of the hanger assemblies has been inspected and shows no signs of unacceptable wear.
- Bearing points have been inspected for integrity and unacceptable wear.
- "S" hooks remain tightly closed.

Suspension Bridge

- Safety surfacing material around and beneath bridge is acceptable.
- All attachment hardware is in place and secure.
- Bearing points have been inspected for integrity and unacceptable wear.
- Supporting bolts are secure.
- Hand railings are in place and secure.
- No corners or edges are sharp.

Arch Bridge

- Safety surfacing material around and beneath bridge is acceptable.
- All connecting hardware is in place and secure.
- Bridge has been inspected from beneath, and bearing points show no sign of unacceptable wear.
- Hand railings are in piece and secure. No corners or edges are sharp.

Climbing Wall

- Safety surfacing material around and beneath Climbing Wall is acceptable.
- All attachment hardware is in place and secure.
- Rope is free of cuts and/or unacceptable wear.
- PVC coated grips are in good shape and secure.
- Transition wall is in place and secure.
- No corners or edges are sharp.

Tic-Tac-Toe and Graphics Cylinders

- All connecting hardware is in place and secure.
- Plastic cylinders are smooth with no protrusions.
- Cylinders rotate freely.

Bouncer

- Safety surfacing material around and beneath Bouncer is acceptable.
- All connecting hardware is in place and secure.
- Concrete footing is not exposed.
- No corners or edges are sharp.

Stationary Accessories

Spiral Slide

- Safety surfacing material around and beneath Spiral Slide is acceptable.
- All connecting hardware is in place and secure.
- Bedway is smooth, clean, and free of foreign objects between sections and/or against support post.
- End cap of center post is intact.
- Entrance platform is secured to deck members and entrance section.
- Concrete footing is not exposed.

Tube Slide

- Safety surfacing material around and beneath Tube Slide is acceptable.
- All connecting hardware is in place and secure.
- Connections between sections are secure and free of foreign objects.
- Slide is securely connected to the structure.
- Slide displays no vertical or horizontal movement.
- Concrete footing is not exposed.

Chain Net / Net Wall Climber

- Safety surfacing material around and beneath Chain Net and Net Wall is acceptable.
- Chain link intersections have been inspected for unacceptable wear.
- Connection points to structure and footings are secure.
- Concrete footings are not exposed.

All Other Stationary Accessories

(includes Vertical Climbers, Fire Poles, Arch Climbers, etc.)

- Safety surfacing material around and beneath stationary accessory is acceptable.
- All connecting hardware is in place and secure.
- All welds are sound.
- Accessory shows no sign of horizontal or vertical movement from structure or ground.
- Concrete footing is not exposed.

Annual Evaluation

Once a year the playground should be evaluated on general conditions. Here is a minimum list of items that should be addressed:

- Have permanent maintenance records and documentation of all-safety inspections and repairs been kept on tile?
- Has all equipment been inspected and repaired in accordance with the established maintenance program?
- Has the regularly scheduled maintenance time schedule been adequate for maintaining safe conditions on the site, the structure, and the safety surfacing material?
- If any accidents have occurred; have they been carefully documented and the situations that caused the accidents corrected?
- Has the playground been adequate in terms of size and play experiences given the number and ages of users?
- Have accessible activities addressed the physical abilities of the users?
- Has existing seating been sufficient to encourage adult supervision from all sides of play structure?
- Have litter containers been adequate in terms of number and/or size? In frequency of being emptied?

Replacement Parts

- Order genuine replacement parts from Playcraft Systems.
- Do not introduce non-factory-supplied substitute parts for any purpose. Great care has been taken to provide the highest quality parts and hardware for your structure and accessories. Correct replacement bolts are not available at local hardware stores.
- All repairs and the replacement of parts must done in accordance with current Playcraft Systems specifications.
- Retain complete permanent documentation of all replacement parts ordered, noting both the date installed and the source of the parts.

TO ORDER REPLACEMENT PARTS CONTACT YOUR LOCAL PLAYCRAFT REPRESENTATIVE OR CONTACT CUSTOMER SERVICE AT 1-800-333-8519 In order to provide prompt service, customer service will require the original purchase information, equipment site address and product model information.

Equipment Repair

Playcraft Systems uses only the finest and most durable materials available in the manufacture of its equipment. Occasionally components, because of damage through vandalism, normal wear and tear and various other reasons, need minor repair. Simple repairs can be made and should be expected over the useful life of your equipment.

The following instructions are intended as a guide for simple repairs in the field and are not intended to provide repair instructions for all situations. If you have any questions about equipment repair for components listed in the following or for repair of equipment or components not specifically addressed, please contact your Playcraft representative or call customer service at 1-800-333-8519

IMPORTANT: Do not try to repair broken heavily worn or damaged equipment or components. Broken, heavily damaged or worn equipment or components must be replaced.

Repair of PVC Coated Components

- Use the PVC repair kit included with the service kit provided with your equipment.
- If you need a replacement PVC repair kit, contact your Playcraft representative or call customer service at 1-800-333-8519.
- Lightly sand the component surface needing to be repaired and clean with Acetone. Next apply liquid
 PVC patch as needed; Allow repaired area to cure for approx. 24 hours prior to use.
 Note: Additional directions are provided with the liquid PVC.

Repair of Powder Coated Components

- Use the Powder Coat repair kit included with the service kit provided with your equipment.
- If you need a replacement Powder Coat repair kit, contact your Playcraft representative or call customer service at 1-800-333-8519
- Lightly sand the component surface needing to be repaired and clean with Acetone. Next apply a coat of primer. Allow drying time.
- Finally apply two coats of powder coat matching touch-up paint. Allow to dry for 24 hrs.

Note: Additional directions are provided with the touch-up paint.

Repair of Plastic "Poly" Components

Do not try to repair deep gouges. Plastic components with deep gouges should be replaced. Minor surface damage to plastic components such as nicks or graffiti can be repaired as follows:

Lightly sand surface needing to be repaired.

Use a heat gun to remove light sanding scratches and to help return plastic to original surface condition. Additional directions may be included with the purchase of a heat gun.- It may be important to practice your plastic repair technique on a hidden surface of the component you wish to repair. (i.e. the under side of a slide)

Notes:

- (A) Heat guns are available through most hardware stores.
- (B) In most cases damaged plastic cannot be repaired to its original condition.

Replacement of Hardware

- Replace all missing, worn and/or damaged hardware with new factory hardware.
- Secure all non self-locking hardware with a liquid thread lock.
- If you need an additional hardware or specialty tools not provided with your service kit, contact your Playcraft representative or call customer service at 1-800-333-8519.

Notes:

- (A) Do not use non-factory hardware.
- (B) When replacing hardware, refer to assembly instructions provided with the original equipment or component.

For replacement parts, additional maintenance supplies or information, please contact your Playcraft representative or customer service at:

Playcraft Systems ● 123 North Valley Drive ● Grants Pass, OR 97526 Tel: 541-955-9199 Fax: 541-955-6130

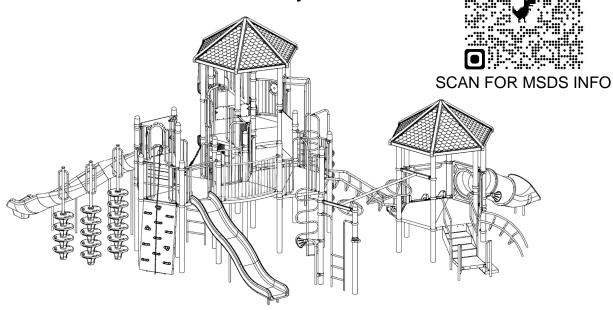
Playground Equipment Maintenance Guidelines		
NOTES:		

PLAYCRAFT SYSTEMS
ROUND 5 STEEL POST SYSTEM

PROJECT NAME:

IMPORTANT! THIS MANUAL CONTAINS:

- Construction Views
- General Installation Guidelines
- Maintenance & Safety Information



INSTALLATION MANUAL TABLE OF CONTENTS	SECTION
Installation Instructions Included	R5 – 01
Construction Drawings	R5 – 02
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Site Safety Recommendations	R5 – 04
Support Posts & Hardware	R5 – 05
Concrete Footings	R5 – 06
General Safety & Warning Labels	R5 – 07
General Maintenance	R5 – 08
Collars	R5 – 09
General Hardware Applications	R5 – 10 to 13

<u>WARNING:</u> Read all instructions thoroughly before installation. Improperly assembled playground equipment can present a serious safety hazard. Appropriate impact attenuating safety surfacing material is required under and around all play structures and must be maintained.

If you have any questions during assembly, please contact your Playcraft Representative or:

PlayCraft Systems

123 North Valley Drive, Grants Pass, OR 97526 Phone: 800-333-8519 Fax: 541-955-6130



PLEASE NOTE: The pages enclosed in this section are the construction drawings for the specific job listed.

<u>WARNING:</u> Read all instructions thoroughly before installation. Improperly assembled playground equipment can present a serious safety hazard. Appropriate impact attenuating safety surfacing material is required under and around all play structures and must be maintained.

R5-03.1 PLEASE READ THE FOLLOWING VERY CAREFULLY BEFORE INSTALLATION

IMPORTANT: Due to the wide variety, modularity and flexibility of our products, we found it necessary to publish these general installation guidelines. These guidelines are intended for use by experienced playground equipment installers and/or general contractors skilled in assembly and installation of playground equipment. As with any project, general construction knowledge and professional judgment may be required. If any questions or concerns arise during the installation or maintenance of your equipment, please contact the factory and ask to speak to a customer service representative at **1-800-333-8519**.

As an installer of Playcraft Playground Equipment you are responsible for understanding the recommendations for surfacing and providing an appropriate impact attenuating safety surfacing material. The owner of the playground equipment is responsible for maintaining an appropriate level of impact attenuating safety surfacing material under and around all playground equipment.

ATTENTION INSTALLER: Upon completion of project, ensure that a copy of the Playground Equipment Manual and Maintenance Kit with all of its contents has been given to the owner of this playground equipment as a product and safety reference and as guidelines for preventative maintenance. Please make it clear to the owner that the Playground Equipment Manual and Maintenance Kit are to be kept on hand at the playground site at all times.

Read all instructions thoroughly before installation. Improperly assembled playground equipment can present a serious safety hazard. An appropriate impact attenuating safety surfacing material is required under and around all play structures and must be maintained.

In addition to the guidelines found in this manual, all equipment purchases shall include a minimum of (1) Top View drawing and (1) Perspective View drawing specific to each piece of equipment. These views are enclosed in Section R5-02 marked "Construction Drawings".

R5 - 03.2 RECOMMENDED TOOLS:

You may need the following tools for installation:

Adjustable End Wrenches
Carpenter's Level
Combination Wrenches
Hacksaw
Hammer
Post Hole Digger
Ratchet Set
Wheelbarrow

Drill & Bits Impact Driver Rubber Mallet
Electric Extension Cord Liquid Thread Lock (LOCTITE®) Safety Glasses

R5 - 03.3 TIGHTENING TORQUE FOR HARDWARE (SCREWS, BOLTS AND NUTS)

Tighten all screws, bolts, and nuts snugly. After fasteners are snugly tightened, turn nuts and screws an additional one-half turn. **IMPORTANT:** Set screws should be turned an additional full turn after snug tightening. Once equipment or components are fully assembled, with hardware tightened/torqued, any excess threads (more than two) extending past the nut should be cut off and filed smooth. **Use liquid thread lock (such as LOCTITE® Threadlocker) with all threaded hardware.**

IMPORTANT: Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

R5 - 03.4 GENERAL INSTALLATION GUIDELINES

- 1 Before you begin, read completely through all instructions carefully.
- 2 Identify all structural components included with your order. Check parts against your packing slip located in the front pocket of the Installation Manual.
- Refer to Section R5 04 for safe playground layout as well as the top view(s) and/or site plan included with your purchase for accurate information on equipment layout. Confirm that the equipment you purchased and its use zones will fit in your site. Site layout is a critical part of overall installation. A clear level site is required for proper installation.
- While referring to the footing diagram in Section R5 06 and top view(s) provided, identify each post location and excavate each hole; one at a time as assembly progresses. When referring to the footing specifications included with these instructions, adjustments must be made to compensate for depth/thickness requirements of the selected impact attenuating safety surfacing material (i.e. wood chips vs. rubber matting).

IMPORTANT: If soil conditions are loose or unstable, larger diameter footings are required. Inquire with local contractors for appropriate recommendations.



R5 - 03.4 GENERAL INSTALLATION GUIDELINES (CONTINUED) To ensure proper alignment of system equipment, it is the manufacturer's recommendation that concrete be poured after assembly. While referring to the following installation instructions, erect the equipment (main structure first) and plumb and level 6 as you proceed. 7 Do not fully tighten hardware until assembly is complete. Once assembly is complete, with the equipment plumb and level, tighten the hardware and pour the concrete. All 8 concrete must cure for at least 72 hours prior to being disturbed. Affix Surfacing Level, Warning and Designed for Ages (age appropriate) labels to equipment. Labels should be placed in a conspicuous area such as by the main equipment access point. For replacement or additional warning 9 labels, please contact customer service at 1-800-333-8519. (Refer to Sections R5 - 07.2 & 07.3 for label type and correct placement) WARNING: Never install play equipment over concrete, asphalt, or bare ground. Always use a resilient impact 10 attenuating safety surfacing material. Loose-fill safety surfacing material should not be installed over concrete or asphalt. Do not let children play on or near play equipment until assembly and installation is complete and an impact attenuating safety surfacing material is installed. 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. To determine the highest accessible part of equipment, refer to the current publication of the CPSC, "Public Playground Safety Handbook", Publication 325 at www.cpsc.gov. The critical height for surfacing is to be rated in accordance with ASTM F 1292, "Specification for Impact Attenuation of Surfacing Material Within the Use Zone of Playground Equipment". The CPSC "Public Playground Safety Handbook" also provides a table of critical heights for selected loose fill materials. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height ratings of their products. 11 The entire area under and around all playground equipment must be covered with an impact attenuating safety surfacing material. Refer to the current publication of the CPSC, "Public Playground Safety Handbook" for recommendations on the type and depth of the impact attenuating safety surfacing material. For a copy of the current publication of the CPSC "Public Playground Safety Handbook" Write To: U.S. Consumer Product Safety Commission Call Toll Free: 1-800-638-2772 Office of Information and Public Affairs Visit the C.P.S.C. web site: www.cpsc.gov Washington, D.C. 20207 Good drainage around structural supports is important (i.e. under swings and at the end of slides) because they tend 12 to become the lowest points and need the most active drainage. Inquire with local contractors for appropriate recommendations. Many surfacing materials can become compacted due to weather and use, which reduces their impact attenuation. It 13 is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary.

R5 - 03.5 SAFETY DURING INSTALLATION

- After doing a layout of <u>all</u> footings and <u>before</u> digging footing holes, be sure to inquire about underground utilities that may exist. Call 811, a federally-mandated national "Call Before You Dig" phone number.
- Do not leave the job site unattended without making sure that all fastening hardware on all main structures and components have been tightened. We also suggest roping off construction areas and covering all holes that do not have a piece of equipment in them with plywood or other suitable material. Ready or not, children will use unattended equipment.
- Due to the weight involved with the structure you have purchased, it is advisable that a party of four to six persons of average build assemble the structure.

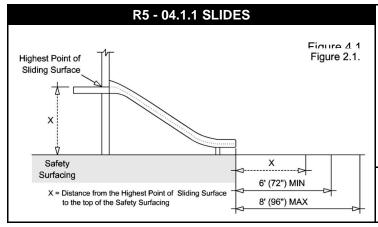


General safety recommendations applicable to the installation and maintenance of play equipment supplied by Playcraft Systems.

R5 - 04.1 USE ZONES

Use zones are the areas under and surrounding each piece of play equipment that must be covered by an appropriate impact attenuating safety surfacing material as described above.

The specific size of these use zones depends on the type of play equipment as follows:



The minimum lower exit end use zone for slide exits is determined as follows:

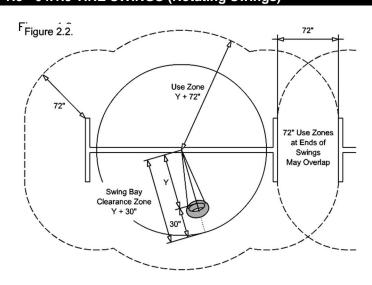
X = The distance from Highest Point of the slide surface to the Safety Surfacing.

If X is less than 72 in. then the exit use zone for that slide shall be a minimum of 72 in. otherwise the minimum exit use zone shall be the distance X, not exceeding the maximum of 96 in. (Refer to Figure 4.1 at left)

IMPORTANT: No other play structure use zone shall overlap the <u>lower exit end use zone</u> of a slide. (Refer to the ASTM F 1487, Section 9.6)

R5 - 04.1.2 BELT SWINGS (To-Fro Swings) The use zone must extend at least twice the distance from the pivot point to the safety surfacing material. The use zone must also extend for a minimum of 72 in. out from each end of the swing frame legs. No other play structure use zone shall overlap the <u>front to rear swing use zone</u>. (Refer to the ASTM F 1487, Section 9.4) **Please refer to the ASTM guidelines for additional information on swings.**

R5 - 04.1.3 TIRE SWINGS (Rotating Swings)



The minimum use zone for rotating swings is determined as follows:

Y = The vertical distance from the top of the Sitting Surface to the Pivot Point.

The minimum use zone of a rotating swing (Ex. a Tire Swing) is determined by taking the distance Y and adding to it 72 in. in all directions. The use zone must also extend for a minimum of 72 in. out of each end from the swing frame legs. The 72 in. use zones at the ends of all swings may overlap. (Refer to Figure 4.2 at left)

IMPORTANT: No other play structure use zone shall overlap the <u>swing bay clearance zone</u>. The rotating swing requires a 108 in. use zone between the rotating swing support structure and all nonswing play structures. (Refer to the ASTM F 1487, Section 9.4.2)

R5 - 04.1.4 ALL OTHER PLAY EQUIPMENT Stationary and rotating play equipment use zones must extend at least 72 in. in all directions from the equipment's perimeter. Rocking/Springing equipment intended for standing use zones must extend at least 84 in. in all directions from the equipment's perimeter with no other use zones overlapping it.

R5 - 04.2 SURFACES

All play equipment must be installed over an appropriate impact attenuating safety surfacing material. It is the responsibility of the playground designer, installer, and operator to ensure that the size, type, and depth of impact attenuating safety surfacing material used complies with the CPSC Handbook. This impact attenuating safety surfacing material must cover the entire use zone area to a depth appropriate for the height of play equipment. See the use zones section for specific dimensions for specific types of play equipment. Please refer to the CPSC "Public Playground Safety Handbook", Publication 325 at www.cpsc.gov for more detailed information regarding these issues.

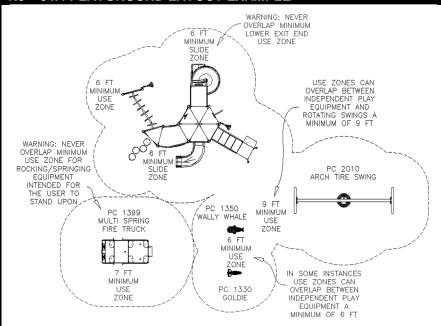
Tubilication 323 at www.epsc.gov for more detailed information regarding these issues.			
	Unitary Safety Surfacing: Pour-In-Place Rubber or Rubber Tiling.		
APPROPRIATE	Loose Fill Materials: Bark nuggets, Wood Mulch, Wood Chips, Pea Gravel and Sand. For the Loose Fill Materials listed, Playcraft recommends a minimum uncompressed depth of 12 in. (9 in. compacted) for equipment with fall heights up to 72 in.		
INAPPROPRIATE	Turf, Undisturbed Natural Ground, Undisturbed Compacted Sand, Decomposed Granite, Asphalt, Concrete, or any other hard surfacing.		

R5 – 04.3 IMPORTANT ITEMS

During the installation and maintenance process, ensure that:

- WARNING: Contact burn injuries can occur when metal play surfaces are located in direct sun. To avoid the risk of such burn injuries the United States Consumer Product Safety Commission recommends in it's handbook for public playground safety that metal play surfaces such as stainless steel slides and bare or painted metal crawl tubes should be located and installed in shaded areas and out of direct sunlight. The proper location of metal play surfaces must be addressed during the play area planning process.
- There are no exposed concrete footings to trip over or fall on. The top of all footings must be at or below the bottom of the layer of impact attenuating safety surfacing material.
- All bolt threads protruding beyond the nut are cut and de-burred until end is smooth to the touch. Sharp edges and/or points of any kind must be eliminated. No more than two threads may be exposed beyond the end of the nut.
- All bolts, screws, set screws, and/or other fasteners are securely tightened. Missing bolts, set screws or other fasteners must be replaced immediately.

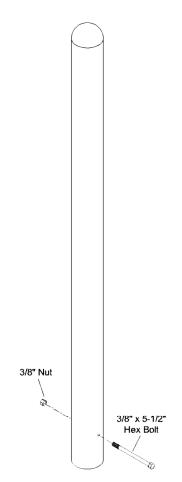
R5 – 04.4 PLAYGROUND LAYOUT EXAMPLE



WARNING: No other play structure use zone shall overlap the <u>lower exit</u> <u>end use zone</u> of a slide or the <u>front to rear use zone</u> of a swing.

In most instances, the use zone at the end of a swing can overlap with other play equipment use zones.

Please refer to the ASTM guidelines for additional information.



FOOTING PIN *Insert bolt as shown above in hole near base of posts.



(2) 45° Corners (Half Deck)



Washer

3/8" x 1/2" Socket Set Screw



Tek Screw

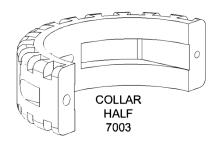
Socket Hd.

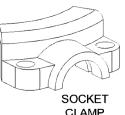


Cap Screw



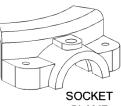
1/4" x 1-3/8" Socket Hd. Cap Screw



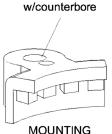


CLAMP TOP 7004

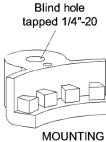
Thru hole



CLAMP **BOTTOM** 7005



MOUNTING BLOCK 7006-T

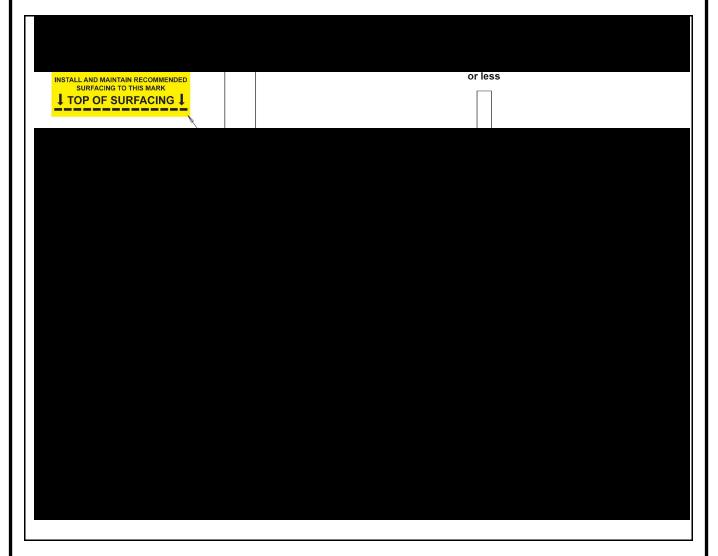


BLOCK 7006-B





IMPORTANT: The footing depth for support posts and other equipment must be adjusted to compensate for the depth/thickness requirements of the selected impact attenuating safety surfacing. (i.e. wood chips vs. rubber matting).



R5 -	- 06.1 IMPORTANT ITEMS
1	Use more concrete as required for supporting activities with movement such as the Track Rides, Traverses, Chinning Bars and Swings.
2	See specific Swing Installation Instructions for swing post footings and ground cover requirements.
3	Larger footings (more concrete) may be required due to weather conditions and poor, unstable, loose or granitic soil. Before changing footing dimensions we recommend that the footings be reviewed and approved by a registered engineer.
4	Base of all footings must be below the frost line. Determine depth of frost line for your area and adjust footing depth (not post and support depth) as required.

R5 -	- 06.1 IMPORTANT ITEMS (CONTINUED)
5	Playcraft Systems recommends a loose fill material such as engineered wood fiber (as described in the CPSC) be installed at a depth of no less than 12 in. to allow for natural shrinkage, and compression during use. A minimum 9 in. depth of compressed loose fill material described above is required for equipment with fall heights up to 6 ft. Comparison of impact attenuating safety surfacing material is available in the "Public Playground Safety Handbook", Publication 325 published by CPSC. When choosing an appropriate impact attenuating safety surfacing material, check with material manufacturer for recommended depth/thickness.
6	Never install loose fill material over concrete or asphalt.
7 The depth of the post or support must be adjusted to compensate for the depth of impact attenuating s material ranging from loose fill material to rubber matting.	
8	This equipment is designed to be installed on a level site. Footings must be cast against undisturbed or compressed soil. Support posts and all attached decks and play components must be plumb and level.

For more information, refer to the current publication of the USCPSC "Public Playground Safety Handbook"

For a copy, write to:
U.S. Consumer Product Safety Commission
Office of Information and Public Affairs
Washington, D.C. 20207

Or call

Toll-Free: 1-800-638-2772

Website: www.cpsc.gov

Step 1
In order to properly install the support posts on your play structure, refer to the Site Safety Recommendations in section R5 – 04 as well as the Top View and/or Site Plan drawings found in the Construction Drawings section R5 - 02. Mark footing hole location(s) and dig hole(s) as determined. Compact base of footing hole(s) with drain rock as specified at proper depth.

Position the support block at the base of the footing hole. Place the support post in the footing hole at the determined depth. The support block helps to stabilize the post during assembly and while the concrete cures, especially in soft soil conditions.

Plumb and square all support posts. Block and brace as required to prepare for final assembly and pouring of concrete.

Do not pour concrete until the structure is completely assembled, leveled and plumbed. Concrete must be



Step 4

allowed to cure completely before using the structure (at least 72 hours).

R5 -	07.1 CHILD SAFETY PRECAUTIONS - PLEASE READ CAREFULLY
1	On-site adult supervision recommended while children are at play.
2	Warn children not to climb or walk on top of playground equipment (framework) not intended for such use.
3	All play equipment should be used in the manner for which it was intended. Children should not swing empty seats or twist ropes and swing chains.
4	Children should be dressed appropriately. Helmets, drawstrings and accessories around the neck, must be removed to prevent strangulation or entanglement.
5	Children should be cautioned to avoid walking too close, between, or in front of moving items.
6	Only one child per swing should be allowed. Instruct children to sit in the center of the swings with their full weight on the seat.
7	Children being pushed on swing equipment should be closely supervised by an adult. It is important to note that an aggressive push could result in a child losing his/her balance.
8	Children should be instructed not to jump off swing equipment when in motion.
9	No more than 3 children should be riding on the tire swing at one time.
10	Children should not be pushed while on the tire swing.
11	Children should be advised to "wait their turn" on activities such as a slide; therefore each child is able to slide down and safely move to the side before another child begins their descent.
12	Children's personal toys (bikes, wagons, etc.) should be stored away from the play structure area.

R5.	- 07.2 SAFTEY / WARNING LABEL ATTACHME	ENT
1	Large structures may require two or more sets of Warning Labels. For additional Warning Labels, call (800) 333-8519. Standard set includes (1) Warning Label and (1) Designed for Ages (2-5, 5-12 or 2-12) age appropriate label.	WIRNING WATER NAME OF THE PARTY OF THE PART
2	Attach in a conspicuous location, such as near an entry.	STATE OF THE PARTY
3	To apply, clean surface with alcohol, remove protective backing and apply to clean post.	STATE OF THE PARTY

R5 - 0	07.3 SURFACING LEVEL LABEL ATTACHMENT	
1	Some play equipment may require recommended surfacing level labels appropriately placed at the bottom of all posts. The correct placement of the labels is dependent on the requirements of the specific equipment design and resilient ground cover choice. Please consult with your Playcraft representative or call the factory at (800) 333-8519 for surfacing and label placement advice.	INSTALL AND MAINTAIN RECOMMENDED SURFACING TO THIS MARK TOP OF SURFACING I
2	To apply, clean surface with alcohol, remove protective backing and apply to clean post.	



\$ASTM LABELS\$

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF

2 TO 5 YEARS OLD

ADULT SUPERVISION IS RECOMMENDED.



Manufactured by Krauss Craft, Inc

1-800-333-8519 • 541-955-9199 www.playcraftsystems.com

TM E1497 KC 00205

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF

5 TO 12 YEARS OLD

ADULT SUPERVISION IS RECOMMENDED.



Manufactured by Krauss Craft, Inc.

1-800-333-8519 • 541-955-9199 www.playcraftsystems.com

ASTM-F1487 KC-0051201

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF

2 TO 12 YEARS OLD

ADULT SUPERVISION IS RECOMMENDED.



Manufactured by Krauss Craft, Inc

1-800-333-8519 • 541-955-9199 www.playcraftsystems.com

ASTM-F1487 KC-00212014

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF

18 MONTHS TO 5 YEARS OLD ADULT SUPERVISION IS RECOMMENDED.



1-800-333-8519 • 541-955-9199 www.playcraftsystems.com

CAN/CSA-Z614

C-0020501C

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF

> 5 YEARS TO 12 YEARS OLD

ADULT SUPERVISION IS RECOMMENDED.



Manufactured by Krauss Craft, In 1-800-333-8519 • 541-955-9199

www.playcraftsystems.com

KC-0051201C

THIS EQUIPMENT HAS BEEN DESIGNED FOR USERS BETWEEN THE AGES OF

> 18 MONTHS TO 12 YEARS OLD

ADULT SUPERVISION IS RECOMMENDED.



1-800-333-8519 • 541-955-9199 www.playcraftsystems.com

CAN/CSA-Z614 KC-00212010

\$WARNING LABEL

AWARNING

- Installation over a hard surface such as concrete, asphalt, or packed earth may result in serious injury or death from falls.
- Play surfaces and surfacing may become hot, supervisors should test for hot surfaces prior to allowing children to play.
- Helmets, drawstrings and accessories around the neck, must be removed to prevent strangulation or entanglement.



1-800-333-8519 • 541-955-9199 www.playcraftsystems.com

TM-F1487-11 KC-0



R5 - 0	7.4 PROPOSITION 65 LABEL ATTACHMENT	
1	Some equipment may or may not contain materials that require labeling under California Proposition 65. To eliminate confusion all California customers will receive the labels shown.	CALIFORNIA PROP 65 WARNING:
2	Attach in a conspicuous location, such as near an entry.	THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR
3	To apply, clean surface with alcohol, remove protective backing and apply to clean post.	OTHER REPRODUCTIVE HARM.

IMPORTANT: To ensure the safest play area and equipment possible, periodic inspections should be performed and recorded on a daily, weekly and monthly basis. Some form of maintenance program should be established and strictly adhered to. A comprehensive list of maintenance steps, including a sample playground maintenance safety inspection form, can be found in the maintenance manual included with your equipment.

	08.1 YOUR GENERAL MAINTENANCE PROGRAM SHOULD INCLUDE AT MINIMUM, THE OWING:
1	Appropriate impact attenuating safety surfacing material must be maintained under and around all playground equipment.
2	The equipment and play area must be kept clean and free of any miscellaneous debris or litter.
3	Moving parts such as ropes, chains, swing hangers, bridges, etc. must be inspected regularly to determine if excessive wear is occurring. Any parts showing excessive wear or damage must be replaced.
4	All bolts, hardware, collars, and fittings must be checked regularly and tightened if necessary.
5	Any broken or missing end caps on pipe must be replaced.
6	Check all Steel and Poly Surfaces and replace or repair as required.
7	Tire swing swivel must be greased at time of installation and on a regular basis. Each swivel is equipped with 1 or 2 grease fittings to allow lubrication with a standard grease gun.
8	Make sure warning labels are legible and in a conspicuous location.

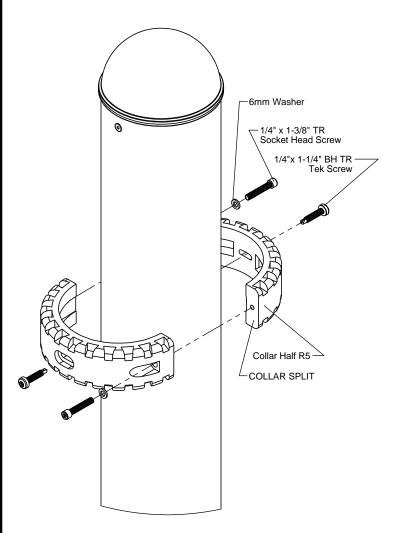
For further information or questions about maintenance or for replacement parts, please contact your Playcraft representative or Playcraft Systems customer service at 1-800-333-8519.



IMPORTANT NOTES: Read First

- (A) Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** See component assembly instructions for collar heights and locations.
- **(C)** The Collar splits should be aligned parallel with deck faces and should always be parallel to the collars of the same component. (See Figure 3)
- **(D)** <u>Important:</u> On overhead event's the collars should be oriented so that the Socket Clamps or Mounting Blocks are installed over the Tek Screw. (See Figure 4)

FIGURE 1 Collar Assembly



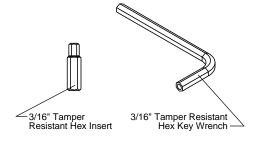


FIGURE 2
Tamper Resistant Tools

Step 1

Locate and mark the position of the collar on the support post, place in the correct position and attach as shown in Figure 1 using the tools shown in Figure 2.

(See Figure 3 and 4 and Notes A, B, C and D)

<u>Important:</u> Do not install Tek Screws until the components location and orientation have been established.

Step 2

Check to ensure the placement of the collar assembly is at the specified height and orientation then install the Tek Screws as shown in Figure 1.

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual. (See Note A)



COLLAR ASSEMBLY

R5-09 Page 2 of 2

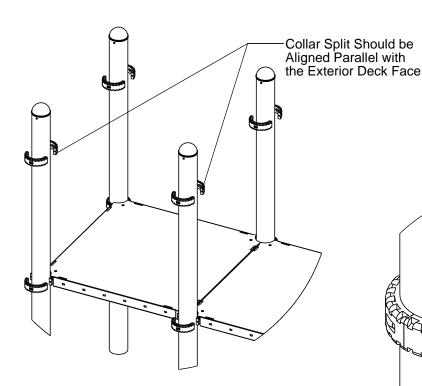


FIGURE 3
Collar Alignment

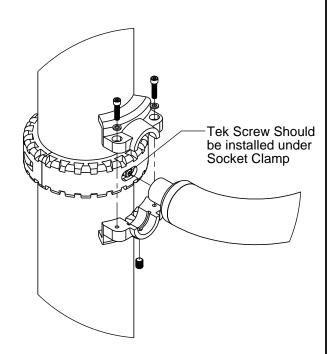


FIGURE 4
Overhead Event Collar Alignment

Specifications

COLLARS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Collars have a multistage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

Part #	DESCRIPTION	QTY.
007003	Collar Half R5	2
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	2
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	2
9333602	Washer Flat 6 mm	2

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



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For Customer Service Call 800.333.8519 (U.S.A.) or 541.955.9199 (International)

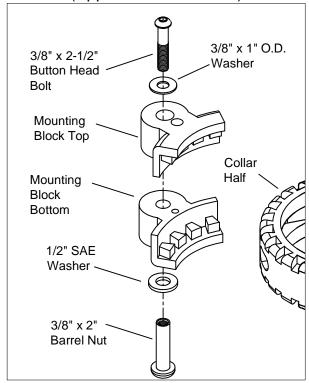
Rev C 3/13/2009

MOUNTING BLOCK APPLICATIONS

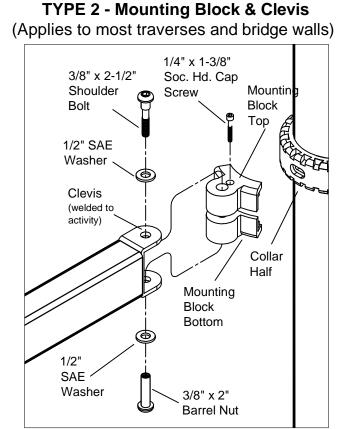
R5 - 10 Page 1 of 2

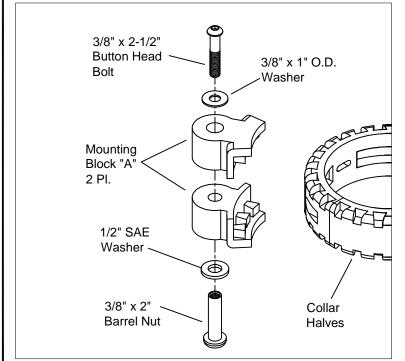
TYPE 1 - Mounting Block

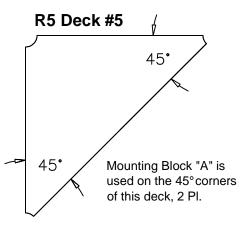
(Applies to most decks)



TYPE 3 - Mounting Block A (Applies to R5 Deck #5 only)







MOUNTING BLOCK APPLICATIONS

R5 - 10 Page 2 of 2

Parts List - Type 1

PART#	DESCRIPTION	QTY
007006-B	Mounting Block R5 Bottom	1
007006-T	Mounting Block R5 Top	1
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	1
9333002	Washer Flat 3/8" x 1" x .100" thick	1
9345002	Washer Flat SAE 1/2"	1
9443092-TR	Nut Barrel 3/8" x 2" BH	1

Parts List - Type 2

DESCRIPTION	QTY.
Mounting Block R5 Bottom	1
Mounting Block R5 Top	1
Bolt Shoulder 3/8" x 2-1/2"	1
Screw Soc HD CS 1/4" x 1-3/8"	1
Washer Flat SAE 1/2"	2
Nut Barrel 3/8" x 2" BH	1
	Mounting Block R5 Bottom Mounting Block R5 Top Bolt Shoulder 3/8" x 2-1/2" Screw Soc HD CS 1/4" x 1-3/8" Washer Flat SAE 1/2"

Parts List - Type 3

PART#	DESCRIPTION	QTY.
007006A	Mounting Block A	2
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	1
9333002	Washer Flat 3/8" x 1" x .100" thick	1
9345002	Washer Flat SAE 1/2"	1
9443092-TR	Nut Barrel 3/8" x 2" BH	1

Specifications

MOUNTING BLOCKS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated, or galvanized as required to resist corrosion.

Installation

NOTES: More detailed instructions will be supplied with the specific components being installed on your play system.

Step 1.

Attach Collar halves to post. Refer to Collar Assembly Page R5 - 09.

Step 2.

Attach Mounting Blocks to Collar and activity to Mounting Blocks using type (1-3) hardware as specifed.

Step 3.

Snug tighten all fasteners.

Step 4.

Check to ensure proper placement of the activity.

Step 5.

Apply liquid thread lock and fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" Section of the Installer's Manual.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



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For Customer Service Call 800.333.8519 (U.S.A.) or 541.955.9199 (International)

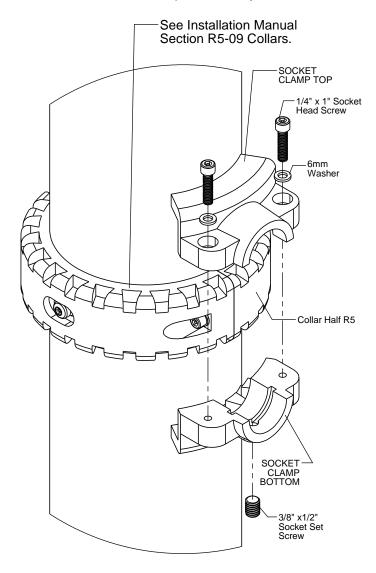
Rev C

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for R5-09 Collars.

FIGURE 1 Socket Clamp Assembly



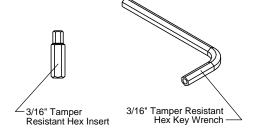


FIGURE 2 Tamper Resistant Tools

Step 1

Attach collar to post. (See Note B)

Step 2

Loosely attach the socket clamps to the collar as shown in Figure 1 using the tools shown in Figure 2. (See Note A and B)

Note: Take care to achieve proper thread engagement of Socket Head Cap Screws to prevent cross threading while drawing upper and lower socket clamp halves together during tightening of hardware.

Step 3

Check the placement of activity and make adjustments if necessary.

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.



SOCKET CLAMP ASSEMBLY

R5-11 Page 2 of 2

Specifications

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

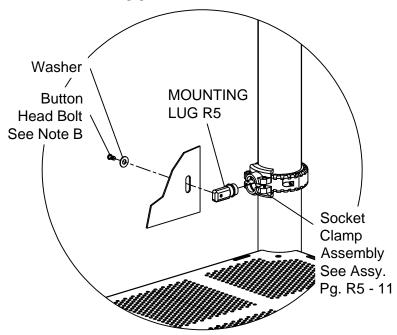
Part #	DESCRIPTION	QTY.
007004	Socket Clamp Top R5	1
007005	Socket Clamp Bottom R5	1
9263012-TR	Screw Soc Set 3/8" x 1/2"	1
9281052-TR	Screw Soc HD 1/4" x 1"	2
9333602	Washer Flat 6 mm	2

Maintenance

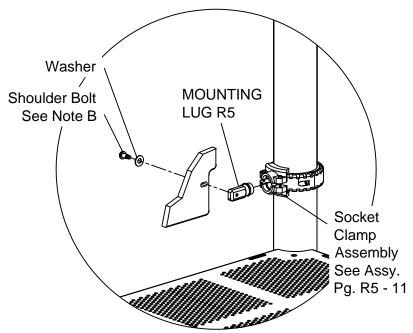
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



Mounting Lug Application - Steel



Mounting Lug Application - HDPE



MOUNTING LUG ASSEMBLY

R5 - 12 Page 2 of 2

Parts List

PART # 007007

DESCRIPTIONMounting Lug R5

QTY.

4

Installation

Notes:

- **A)** More detailed instructions will be supplied with the specific components being installed on your play system.
- **B)** Note that the length of the Button Head Bolt or Shoulder Bolt varies depending upon the application.

Step 1.

Attach Collar halves to Post. Refer to Collar Assembly Page R5 - 09.

Step 2.

Attach Socket Clamp Assembly to Collar. Refer to Socket Clamp Assembly Page R5 - 11.

Step 3.

Attach the activity to the Mounting Lug using the hardware as specified for the specific application.

Step 4.

Snug tighten all fasteners.

Step 5.

Check to ensure proper placement of the activity and make adjustments if necessary.

Step 6.

Apply liquid thread lock and fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" Section of the Installer's Manual.

Specifications

MOUNTING LUG:

Shall be precision die-cast from a high strength aluminum alloy. The Mounting Lug has a multi-stage baked-on powder coat finish.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

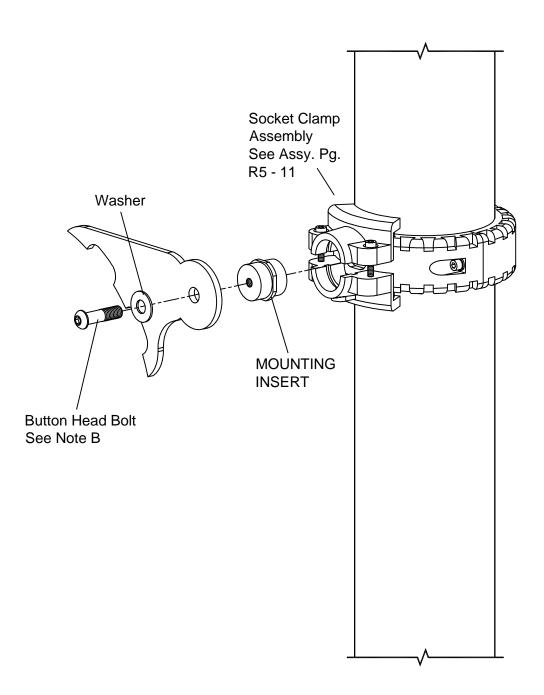


Manufactured by Krauss Craft, Inc. www.playcraftsystems.com

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Rev B

Mounting Insert Application



MOUNTING INSERT ASSEMBLY

R5 - 13 Page 2 of 2

Parts List

PART# 007015

DESCRIPTION Mounting Insert

QTY.

Installation

Notes:

- A) More detailed instructions will be supplied with the specific components being installed on your play system.
- **B)** Note that the length of the Button Head Bolt varies depending upon the application.

Step 1.

Attach Collar halves to Post. Refer to Collar Assembly Page R5 - 09.

Step 2.

Attach Socket Clamps to Collar. Refer to Socket Clamp Assembly Page R5 - 11

Step 3.

Attach the activity to the using the Mounting Insert and hardware as specified for the specific application.

Step 4.

Snug tighten all fasteners.

Step 5.

Check to ensure proper placement of the activity and make adjustments if necessary.

Step 6.

Apply liquid thread lock and fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" Section of the Installer's Manual.

Specifications

MOUNTING INSERTS:

Shall be precision die-cast from a high strength aluminum alloy.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



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Rev B

DECK TO DECK ASSEMBLY INSTALLATION INSTRUCTIONS

1100-2 Page 1 of 2

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** These instructions apply to (2) Decks of the same or different styles that are joined together at the same level. See specific deck installation instructions for attaching each deck corner to mounting blocks on post collars.
- **(C)** If Play System has (2) Half Hex Decks 4-Post, (2) 5 Post 90" Decks, or a combination of the two connected at the same level refer to 1100-3 installation instructions. These configurations use longer button head bolts.
- **(D)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1 Deck to Deck Assembly **NOTE**: R5 Square Deck to Square Deck Assembly shown. Other configurations will vary slightly, but does not affect assembly.



DECK TO DECK ASSEMBLY INSTALLATION INSTRUCTIONS

1100-2 Page 2 of 2

Step 1

Refer to Top View drawing in the Playground Equipment Manual to locate the position(s) of decks on your play structure.

Step 2

Attach Deck to Deck as shown in Figure 2. (See Note A)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

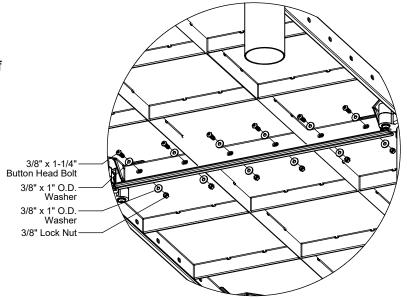


FIGURE 2

Parts List

Part #	DESCRIPTION	QTY
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9413002	Nut Lock 3/8"	6

Specifications

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



DECK TO DECK LONG ASSEMBLY INSTALLATION INSTRUCTIONS

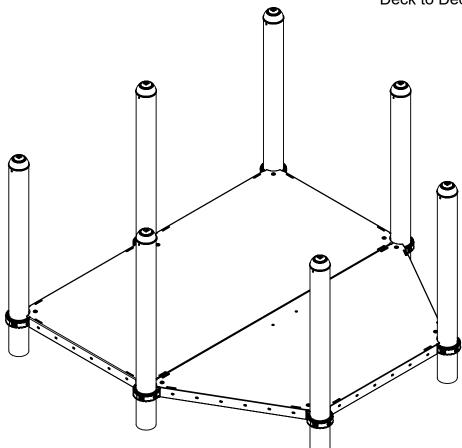
1100-3 Page 1 of 2

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** These instructions apply to (2) Long Decks of the same or different styles that are joined together at the same level. See specific deck installation instructions for attaching each deck corner to mounting blocks on post collars.
- **(C)** If Play System has (2) Short Decks connected at the same level refer to 1100-2 installation instructions. These configurations use shorter button head bolts.
- **(D)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1

Deck to Deck Long Assembly



NOTE: R5 5 Post 90" Deck to Half Hex Deck 4-Post Assembly shown. Other configurations will vary slightly, but does not affect assembly.

DECK TO DECK LONG ASSEMBLY INSTALLATION INSTRUCTIONS

1100-3 Page 2 of 2

Step 1

Refer to Top View drawing in the Playground Equipment Manual to locate the position(s) of decks on your play structure.

Step 2

Attach Deck to Deck as shown in Figure 2. (See Note A)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

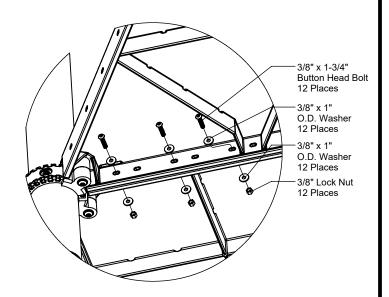


FIGURE 2

Parts List

Part #	DESCRIPTION	QTY
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	12
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

Specifications

HARDWARE:

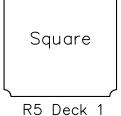
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

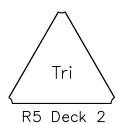
Maintenance

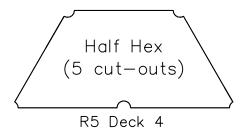


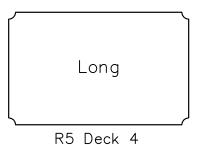
DECK IDENTIFICATION

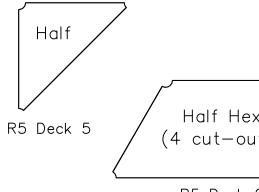
R5-1100 Page 1 of 1

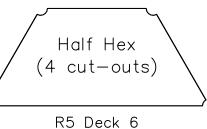










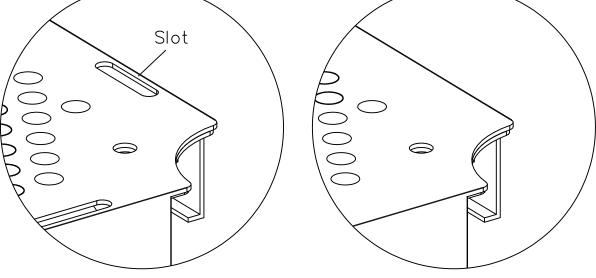


Note: Most walls require Decks w/ slots.



APPLIES TO: Full Walls Half Walls **Transition Walls** Sit-Down Walls

Deck Without Slots





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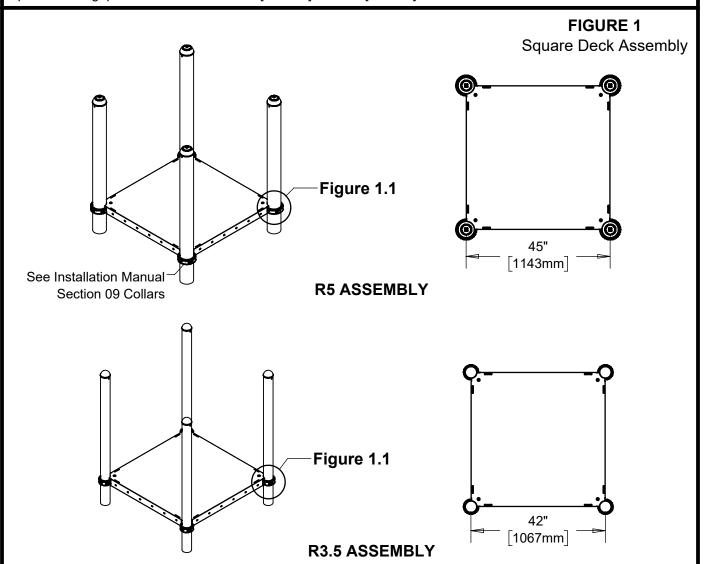
Rev. B

SQUARE DECK ASSEMBLY INSTALLATION INSTRUCTIONS

1101 Page 1 of 2

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** The top of the collars are located 7/8" [22mm] below the top of the deck. Refer to Installation Manual for 09 Collars installation instructions.
- **(C)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.
- **(D)** All deck hieghts on your system's top view drawing are measured from the top of ground cover (finished grade) to the top of the deck. Post location dimensions are on centers.
- **(F)** Never allow the gap between decks to be between 3-1/2" [89mm] and 9" [229mm]. Deck fillers are provided for gaps between decks with 6" [152mm] and 12" [305mm] rise increments.



SQUARE DECK ASSEMBLY INSTALLATION INSTRUCTIONS

1101 Page 2 of 2

Step 1

Attach Deck to Collars as shown in Figure 1.1. (See Note A)

NOTE: 4 Places

Step 2

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 3

Place required protective surfacing under and around Square Deck Assembly. (See Note C)

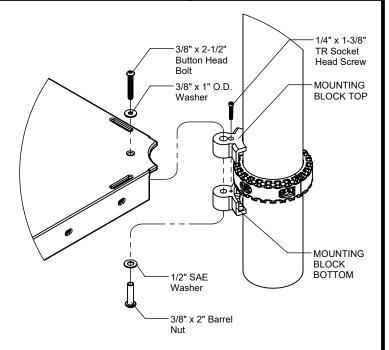


Figure 1.1

R5 Parts List

Part #	DESCRIPTION	QTY
CF-7008	R5 Deck 1 (Square Deck)	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

R3.5 Parts List

Part #	DESCRIPTION	QTY
CG-8101	Square Deck R3.5	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Specifications

SQUARE DECK:

Shall be fabricated from punched, formed, and welded 12 gauge sheet steel. The Square Deck shall be Play Tuff™ coated after fabrication.

MOUNTING BLOCKS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks shall have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



HALF HEX DECK 4-POST ASSEMBLY INSTALLATION INSTRUCTIONS

1106 Page 1 of 2

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** The top of the collars are located 7/8" [22mm] below the top of the deck. Refer to Installation Manual for 09 Collars installation instructions.
- **(C)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.
- **(D)** All deck hieghts on your system's top view drawing are measured from the top of ground cover (finished grade) to the top of the deck. Post location dimensions are on centers.
- **(F)** Never allow the gap between decks to be between 3-1/2" [89mm] and 9" [229mm]. Deck fillers are provided for gaps between decks with 6" [152mm] and 12" [305mm] rise increments.

FIGURE 1 Half Hex Deck 4-Post Assembly 90" [2286mm] 39" [990mm] [1143mm] 45" 221/3" Figure 1.1 [1143mm] ີ່ໄ∫572mm]∫ See Installation Manual Section 09 Collars **R5 ASSEMBLY** 84" [2134mm] 36%' 42" [924mm] [1067mm] 21" 1067mm 533mm Figure 1.1 **R3.5 ASSEMBLY**

HALF HEX DECK 4-POST ASSEMBLY INSTALLATION INSTRUCTIONS

1106 Page 2 of 2

Step 1

Attach Deck to Collars as shown in Figure 1.1. (See Note A)

NOTE: 4 Places

Step 2

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 3

Place required protective surfacing under and around Half Hex Deck 4-Post Assembly. (See Note C)

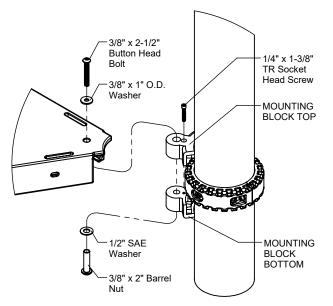


Figure 1.1

R5 Parts List

Part #	DESCRIPTION	QTY
CF-7052	Half Hex Deck 4-Post R5	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

R3.5 Parts List

Part #	DESCRIPTION	QTY
CG-8174	Half Hex Deck 4 Post R3.5	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Specifications

HALF HEX DECK 4-POST:

Shall be fabricated from punched, formed, and welded 12 gauge sheet steel. The Half Hex Deck 4-Post shall be Play Tuff™ coated after fabrication.

MOUNTING BLOCKS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks shall have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

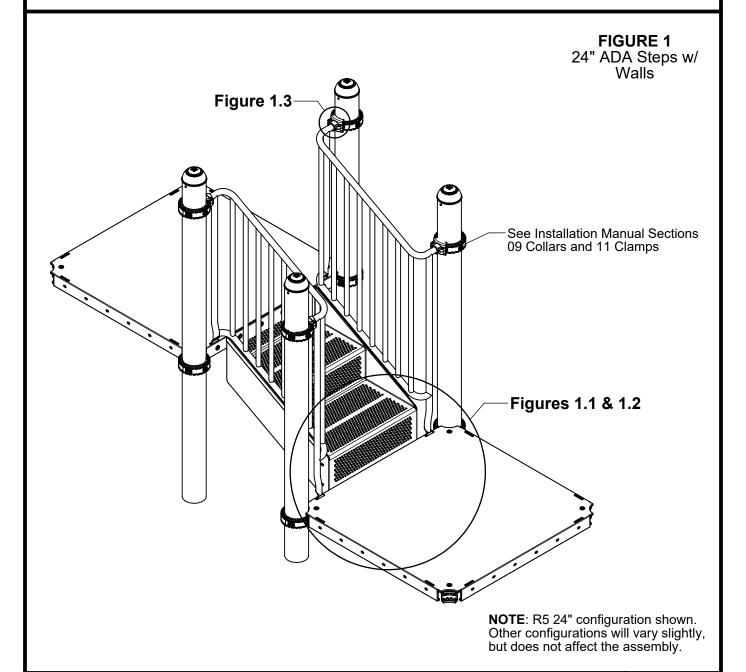


ADA STEPS w/ WALLS INSTALLATION INSTRUCTIONS

1206 Page 1 of 4

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps installation instructions.
- **(C)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.



ADA STEPS w/ WALLS INSTALLATION INSTRUCTIONS

1206 Page 2 of 4

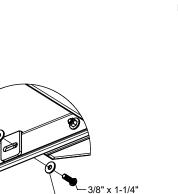
Step 1

Attach ADA Steps to lower deck as shown in Figure 1.1.

Repeat for upper deck. (See Note A)

3/8" x 1" O.D.

Washer 3/8" Lock Nut



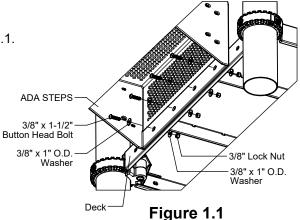
Button Head Bolt 3/8" x 1" O.D. Washer

Figure 1.2

Step 3

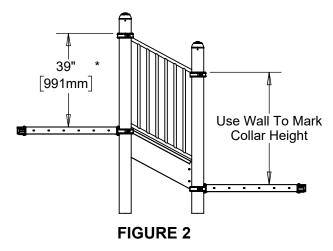
Attach collars at height shown in Figure 2. (See Note B)

* Height shown from top of deck to top of collar.



Step 2

Loosely attach ADA Step Walls to decks as shown in Figure 1.2. (See Note A)



Step 4

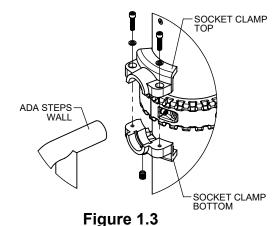
Attach ADA Step Walls to collars as shown in Figure 1.3. (See Note B)

Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 6

Place appropriate compliant protective surfacing under and around ADA Steps. (See Note C)





ADA STEPS w/ WALLS INSTALLATION INSTRUCTIONS

1206 Page 3 of 4

R5 Parts List

R5-1206-12 - 12" ADA Steps w/ Walls R5		
Part #	DESCRIPTION	QTY.
CE-4335	ADA Step 12-26	1
FS-1206-12R	ADA Steps 12-26 Wall Set R5	1
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5-1206-18 - 18" ADA Steps w/ Walls R5		
Part #	DESCRIPTION	QTY.
CE-4380	ADA Steps 18-26	1
FS-1206-18R	ADA Steps 18-26 Wall Set R5	1
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5-1206-24 - 24" ADA Steps w/ Walls R5		
Part #	DESCRIPTION	QTY.
CE-4203	ADA Steps 24-26	1
FS-1206-24R	ADA Steps 24-26 Wall Set R5	1
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5-1206-24R45 - ADA Steps w/ Walls 24"H x 45"L R5		
Part #	DESCRIPTION	QTY.
CE-4911	ADA Steps 24-26	1
FS-1206-24R45	ADA Steps 24-26-45 Wall Set	1
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5-1206-24RCRV - 24" Curved Steps w/ Walls R5		
Part #	DESCRIPTION	QTY.
CF-0848	Curved Steps 24" Rise R5	1
FS-1206-24CRVI	Curved Steps Inner Wall 24" Rise R5	1
FS-1206-24CRVO	Curved Steps Outer Wall 24" Rise R5	1
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5-1206-30 - 30" ADA Steps w/ Walls R5		
Part #	DESCRIPTION	QTY.
CE-4194	ADA Steps 30-26	1
FS-1206-30	ADA Steps 30-26 Wall Set R5	1
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5-1206-36 - 36" ADA Steps w/ Walls R5		
Part #	DESCRIPTION	
CE-4294	ADA Steps 36-26	1
FS-1206-36R	ADA Steps 36-26 Wall Set R5	1
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5-1206-42 - 42" ADA Steps w/ Walls R5		
Part #	# DESCRIPTION (
CE-0030	ADA Steps 42-26	1
FS-1206-42R	ADA Steps 42-26 Wall Set R5	1
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5-1206-48 - 48" ADA Steps w/ Walls R5		
Part #	Part # DESCRIPTION Q	
FS-1206-48R	ADA Steps 48-26 Wall Set R5	1
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12
CE-4486	ADA Steps 48-26	1

ADA STEPS w/ WALLSINSTALLATION INSTRUCTIONS

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R3.5 Parts List

R3.5-1206-12 - 12" ADA Steps w/ Walls R3.5		
Part #	DESCRIPTION	QTY.
CE-4335	ADA Step 12-26	1
FS-1206-12R35	ADA Steps 12-26 Wall Set R3.5	1
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

Part #	DESCRIPTION	
CE-4380	ADA Steps 18-26	1
FS-1206-18R35	ADA Steps 18-26 Wall Set R3.5	1
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R3.5-1206-24 - 24" ADA Steps w/ Walls R3.5		
Part #	DESCRIPTION	
CE-4203	ADA Steps 24-26	1
FS-1206-24R35	ADA Steps 24-26 Wall Set R3.5	1
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R3.5-1206-30 - 30" ADA Steps w/ Walls R3.5		
Part #	Part # DESCRIPTION	
CE-4194	ADA Steps 30-26	1
FS-1206-30R35	ADA Steps 30-26 Wall Set R3.5	1
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R3.5-1206-36 - 36" ADA Steps w/ Walls R3.5		
Part #	DESCRIPTION	
CE-4294	ADA Steps 36-26	1
FS-1206-36R35	ADA Steps 36-26 Wall Set R3.5	1
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12
FS-1206-36R35	ADA Steps 36-26 Wall Set R3.5	1

R3.5-1206-42 - 42" ADA Steps w/ Walls R3.5		
Part #	art # DESCRIPTION	
CE-0030	ADA Steps 42-26	1
FS-1206-42R35	ADA Steps 42-26 Wall Set R3.5	1
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R3.5-1206-48 - 48" ADA Steps w/ Walls R3.5		
Part #	DESCRIPTION	QTY.
CE-4486	ADA Steps 48-26	1
FS-1206-48R35	ADA Steps 48-26 Wall Set R3.5	1
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

Specifications

ADA STEPS:

Shall be made using punched, formed, and welded 12 gauge sheet steel with reinforcing cross members and gussets. The ADA Steps shall be Play-Tuff™ coated after fabrication.

ADA STEP WALLS:

Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1.029" O.D. 14 gauge steel rungs and 1/4" thick steel brackets. The ADA Step Walls shall have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

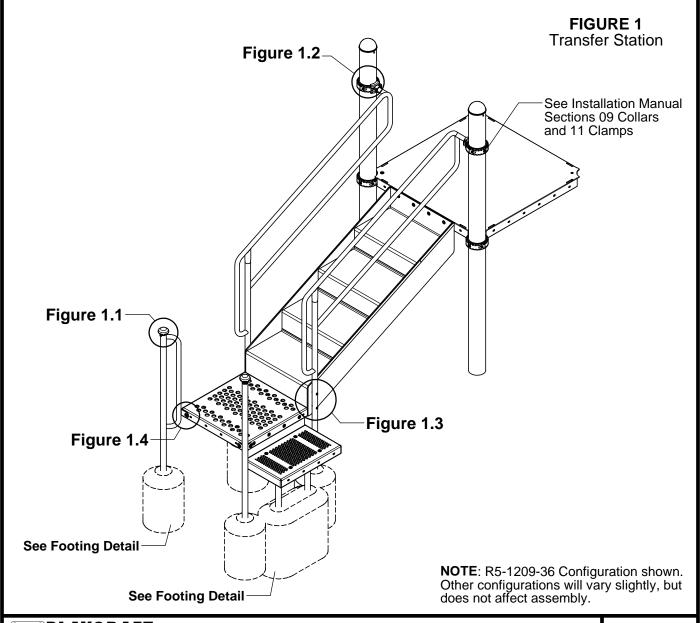
Maintenance



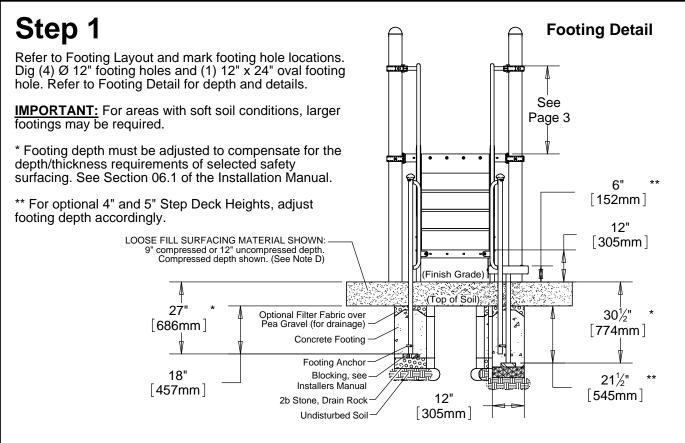
1209 Page 1 of 7

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) Refer to Installation Manual for 09 Collars and 11 Socket Clamps installation instructions.
- **(D)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.



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Top View - Footing Layout	15" [381mm]
	31 ¹³ / ₁₆ " (See Table)
	33%"
,	33½"
3"	27 ¹ / ₁₆ ":
[76mm]	24" [610mm] 13 ¹³ / ₁₆ " [351mm]

Footing Distance Table Center of Post to Center of Footing			
Deck Height	Assembly	X (in.)	X (mm)
24"	Transfer Station 12-24	13-1/4"	337
36"	Transfer Station 12-36	28-1/4"	717
42"	Transfer Station 12-42	43"	1092
48"	Transfer Station 12-48	58-1/4"	1480
60"	Transfer Station 12-60	73-1/4"	1861
72"	Transfer Station 12-72	103-1/4"	2623



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Step 2

Locate and attach collars to posts at height shown in Figure 2. (See Note C)

NOTE: Collar height varies based on Transfer Station Hand Rail Type.

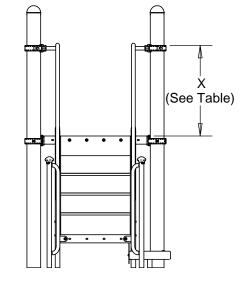
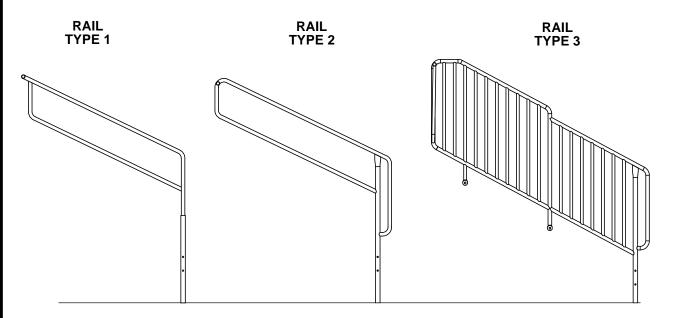


FIGURE 2

Transfer Station Hand Rail Identification and Collar Height



Collar Height Table Top of Deck to Top of Collar		
Hand Rail	X (in.)	X (mm)
TYPE 1	35-1/2"	902
TYPE 2 & 3	33"	838

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Step 3 (Factory Assembled)

Attach Transfer Leg Top to Transfer Deck Support as shown in Figure 1.1. (See Note A)

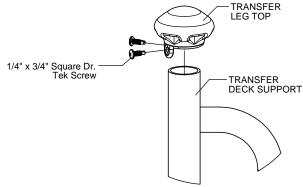


Figure 1.1

Step 4

Place Transfer Rails into footing holes and attach to collars as shown in Figure 1.2. (See Note C)

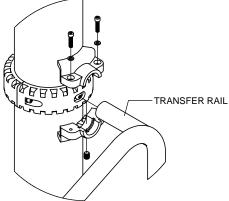


Figure 1.2

Step 5

Attach ADA Steps to Transfer Rails as shown in Figure 1.3. (See Note A)

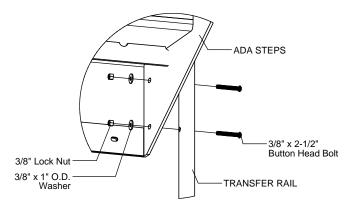


Figure 1.3

3/8" x 1" O.D. Washer 3/8" x 1" O.D. Washer 3/8" x 1-1/2" Button Head Bolt

Step 6

Attach ADA Steps to deck as shown in Figure 3. (See Note A)

FIGURE 3

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Step 7

For Transfer Station to 60" & 72" Decks Only

Attach Transfer Rail to ADA Steps as shown in Figure 4. (See Note A)

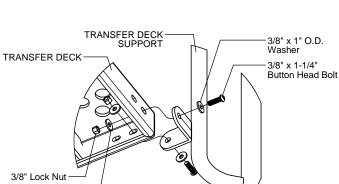
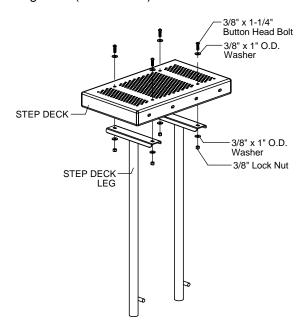


Figure 1.4

Step 9

3/8" x 1" O.D. Washer

Place Transfer Deck Supports into footing holes and attach Transfer Deck to ADA Steps as shown in Figure 5. (See Note A)



TRANSFER RAIL

ADA STEPS

3/8" x 1-1/4"

Button Head Bolt

3/8" x 1" O.D.

Washer

3/8" x 1" O.D.

Washer

FIGURE 4

Step 8

Attach Transfer Deck Supports to Transfer Deck as shown in Figure 1.4. (See Note A)

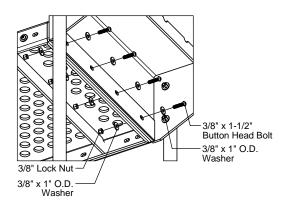


FIGURE 5

Step 10

Attach Step Deck Legs to Step Deck as shown in Figure 6. (See Note A)

FIGURE 6



Manufactured by Krauss Craft, Inc. www.playcraftsystems.com

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Step 11

Place Step Deck Legs into footing holes and attach Filler to Transfer Deck and Step Deck as shown in Figure 7. (See Note A)

Step 12

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 13

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 14

Place required protective surfacing under and around Transfer Station. (See Note D)

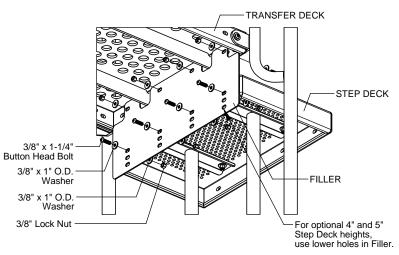


FIGURE 7

Specifications

STEP DECK LEG:

Shall be fabricated using 1.660" O.D. 11 gauge steel tubing with welded 10 gauge steel mounting bracket. The Step Deck Leg shall have a multi-stage baked-on powder coat finish.

STEP RAILS:

Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1.660" O.D. 11 gauge steel leg. The Step Rails shall have a multi-stage baked-on powder coat finish.

TRANSFER STATION WALL:

Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1.660" O.D. 11 gauge steel leg and 1.029" O.D. 14 gauge steel rungs. The Transfer Station Wall shall have a multi-stage baked-on powder coat finish.

STEPS & DECKS:

Shall be fabricated using punched, formed and welded 14 gauge sheet steel. Steps and Decks shall be Play-Tuff™ coated after fabrication.

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.



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Parts List

S-12	09-12 - Transfer Station 12-24	
Part #	DESCRIPTION	QTY.
AE-4206	Vertical Filler #8	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
CE-4335	ADA Step 12-26	1
FS-1202	Step Deck Leg	2
FS-1209-12	Transfer Station H Rail 24	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	16
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	52
9413002	Nut Lock 3/8"	28

S-1209-36 - Transfer Station 12-48		
Part #	DESCRIPTION	QTY.
AE-4206	Vertical Filler #8	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
CE-4294	ADA Steps 36-26	1
FS-1202	Step Deck Leg	2
FS-1209-36R	Transfer Station H. Rail 48	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	16
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	52
9413002	Nut Lock 3/8"	28

S-1209-24 - Transfer Station 12-36		
Part #	DESCRIPTION	QTY.
AE-4206	Vertical Filler #8	1
CE-4203	ADA Steps 24-26	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
FS-1202	Step Deck Leg	2
FS-1209-24R	Transfer Station H. Rail 36	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	16
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	52
9413002	Nut Lock 3/8"	28

S-1209-48 - Transfer Station 12-60		
Part #	DESCRIPTION	QTY.
AE-4206	Vertical Filler #8	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
CE-4486	ADA Steps 48-26	1
FS-1202	Step Deck Leg	2
FS-1209-48	Transfer Station Wall 60	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	20
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	60
9413002	Nut Lock 3/8"	32

S-1209-30 - Transfer Station 12-42		
Part #	DESCRIPTION	QTY.
AE-4206	Vertical Filler #8	1
CE-4194	ADA Steps 30-26	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
FS-1202	Step Deck Leg	2
FS-1209-30R	Transfer Station H. Rail 42	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	16
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	52
9413002	Nut Lock 3/8"	28

S-1209-60 - Transfer Station 12-72		
Part #	DESCRIPTION	QTY.
AE-4206	Vertical Filler #8	1
CE-0166	ADA Steps 60-26	1
CE-4204	Transfer Deck 2	1
CE-4205	Step Deck 3	1
FS-1202	Step Deck Leg	2
FS-1209-60	Transfer Station Wall 72	2
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	20
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	8
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	60
9413002	Nut Lock 3/8"	32

Assembled Parts List

Part #	DESCRIPTION	QTY.
FS-1209A	Transfer Deck Support	2
GE-4636	Transfer Leg Top	2
9271032	Screw Tek 1/4" x 3/4" PH SQDR	4

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



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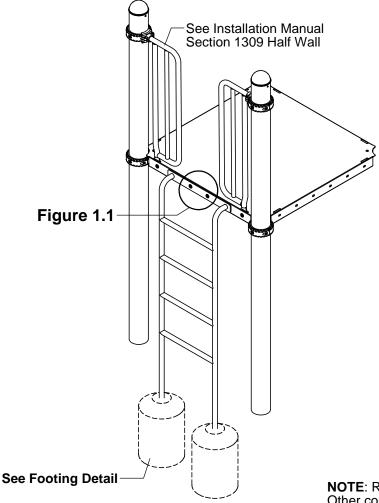
VERTICAL LADDER INSTALLATION INSTRUCTIONS

1210 Page 1 of 3

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) Refer to Installation Manual for 1309 Half Wall installation instructions.
- **(D)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1 Vertical Ladder



NOTE: R5 5' Vertical Ladder shown. Other configurations will vary slightly, but does not affect assembly.

VERTICAL LADDER INSTALLATION INSTRUCTIONS

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Step 1 Footing Detail

Refer to Footing Layout and mark footing hole locations. Dig (2) \emptyset 12" footing holes. Refer to Footing Detail for depth and details.

<u>IMPORTANT:</u> For areas with soft soil conditions, larger footings may be required. Additionally, half foot deck heights will require 6" deeper footing holes.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

LOOSE FILL SURFACING MATERIAL SHOWN: 9" compressed or 12" uncompressed depth. Compressed depth shown. (See Note D)

(Finish Grade)

(Top of Soil)

Optional Filter Fabric over Pea Gravel (for drainage)

Concrete Footing
Footing Anchor
Blocking, see Installers Manual
2b Stone, drain rock
Undisturbed Soil

(Top of Soil)

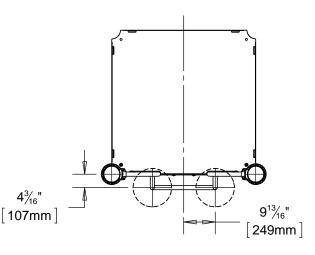
27"

(686mm]

(886mm]

(457mm]

Top View - Footing Layout



305mm

VERTICAL LADDER INSTALLATION INSTRUCTIONS

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Step 2

Attach Half Walls to Deck. Place Vertical Ladder into footing holes and attach to deck as shown in Figure 1.1. (See Notes A & C)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 4

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 5

Place required protective surfacing under and around Vertical Ladder. (See Note D)

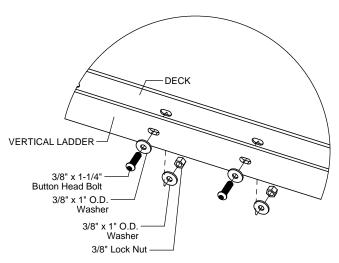


Figure 1.1

Parts List

Part #	DESCRIPTION	QTY.
Varies	Vertical Ladder	1
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9413002	Nut Lock 3/8"	2

Specifications

VERTICAL LADDER:

Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1.315" O.D. 12 gauge steel rungs and 1/4" thick steel mounting plate. The Vertical Ladder shall have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

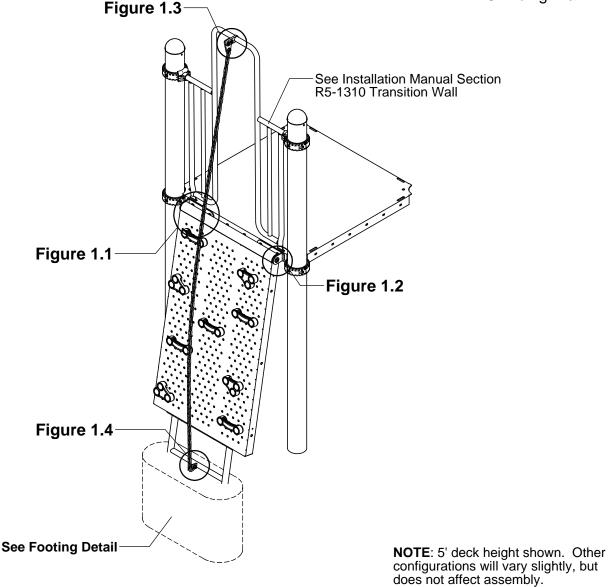
Maintenance



IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) Refer to Installation Manual for R5-1310 Transition Wall assembly instructions.
- **(D)** Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult you surfacing supply representative.

FIGURE 1 Climbing Wall

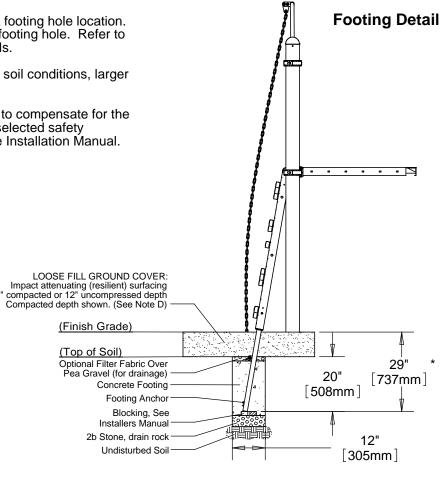


Step 1

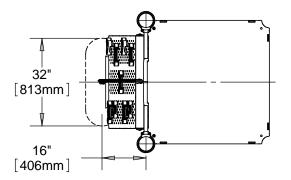
Refer to Footing Layout and mark footing hole location. Dig (1) 12" x 32" x 20" deep oval footing hole. Refer to Footing Detail for depth and details.

IMPORTANT: For areas with soft soil conditions, larger footings may be required.

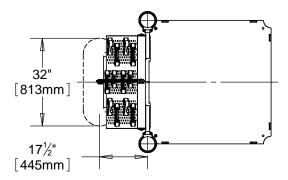
* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.



60" Deck Top View - Footing Layout



72" Deck Top View - Footing Layout



Step 2 (Factory Assembled)

Attach Climb Chain Hanger to Grip Climb Wall Chain as shown in Figure 2. (See Note A)

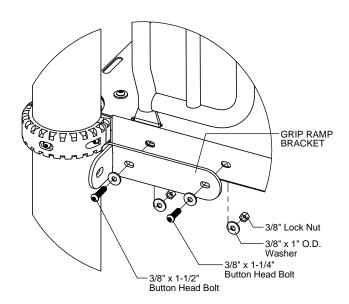


Figure 1.1

Step 4

Attach Grip Climb Wall Leg to Grip Climb Wall as shown in Figure 3. (See Note A)

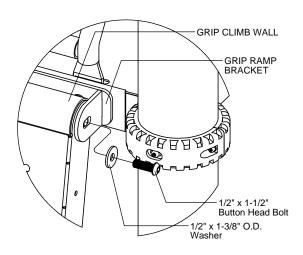


Figure 1.2

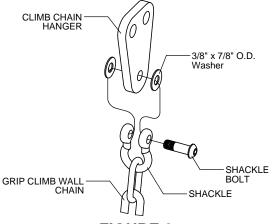
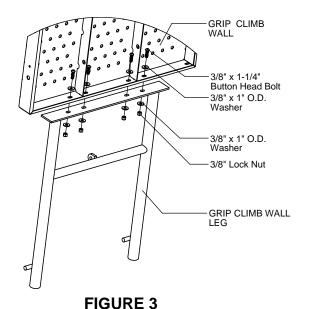


FIGURE 2

Step 3

Using Grip Climb Wall as a guide, position and attach Grip Ramp Brackets and Tranistion Wall to deck as shown in Figure 1.1. Fully tighten Grip Ramp Brackets at this time. (See Notes A & C)

NOTE: Use (2) 3/8" x 1-1/2" Button Head Bolts included with Climbing Wall assembly.



Step 5

Place Grip Climb Wall Leg into footing hole and attach Grip Climb Wall to Grip Ramp Brackets as shown in Figure 1.2. (See Note A).

CLIMBING WALL

Step 6

Locate Grips as desired and attach to Grip Climb Wall as shown in Figure 4. (See Note A)

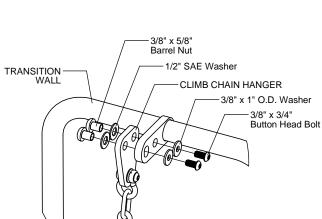


Figure 1.3

GRIP 3/8" x 1-1/4" Button Head Bolt 3/8" x 1" O.D. Washer

FIGURE 4

Step 7

Attach Climb Chain Hanger to Transition Wall as shown in Figure 1.3. (See Note A)

Step 8

Attach Grip Climb Wall Chain to Grip Climb Wall Leg as shown in Figure 1.4. (See Note A)

Step 9

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 10

Plumb and level entire component. Pour concrete into footing hole. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 11

Place appropriate compliant protective surfacing under and around Climbing Wall. (See Note D)

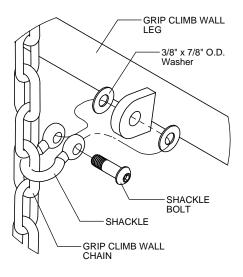


Figure 1.4



Manufactured by Krauss Craft, Inc. www.playcraftsystems.com

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Rev L 6/30/2010

Parts List

60" DECK HEIGHT		
Part #	DESCRIPTION	QTY
CE-4370	Grip Climb Wall 60"	1
FS-1214	Grip Climb Wall Leg	1
FS-1214-BRKT	Grip Ramp Bracket	2
GE-4152	Ramp Grip 2-Hole	5
GE-4190	Ramp Grip 3-Hole	4
451165	Shackle w/Bolt	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	28
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	2
9105072	Bolt Button Head 1/2" x 1-1/2"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	40
9333042	Washer Flat 3/8" x 7/8" O.D.	2
9335062-5	Washer Flat 1/2" x 1-3/8" OD	2
9345002	Washer Flat SAE 1/2"	2
9413002	Nut Lock 3/8"	8
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2

72" DECK HEIGHT		
Part #	DESCRIPTION	QTY
CE-4369	Grip Climb Wall 72"	1
FS-1214	Grip Climb Wall Leg	1
FS-1214-BRKT	Grip Ramp Bracket	2
GE-4152	Ramp Grip 2-Hole	6
GE-4190	Ramp Grip 3-Hole	6
451165	Shackle w/Bolt	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	36
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	2
9105072	Bolt Button Head 1/2" x 1-1/2"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	48
9333042	Washer Flat 3/8" x 7/8" O.D.	2
9335062-5	Washer Flat 1/2" x 1-3/8" OD	2
9345002	Washer Flat SAE 1/2"	2
9413002	Nut Lock 3/8"	8
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2

Assembled Parts List

Part #	DESCRIPTION	QTY
AE-4340	Climb Chain Hanger	1
HE-4371	Grip Climb Wall Chain	1
451165	Shackle w/Bolt	1
9333042	Washer Flat 3/8" x 7/8" O.D.	2

Specifications

CLIMB CHAIN HANGER:

Shall be laser-cut from 3/8" plate steel. The Climb Chain Hanger shall have a multi-stage baked-on powder coat finish.

GRIP CLIMB WALL:

Shall be formed from 12 gauge punched sheet steel with a hole pattern to provide a variety of attachment points for die-cast aluminum grips. The Grip Climb Wall will be Play-Tuff[™] coated after fabrication.

GRIP CLIMB WALL CHAIN:

Shall be 5/0 galvanized low-carbon steel chain with silver shield finish. The Grip Climb Wall Chain shall be Play-Tuff™ coated.

GRIP CLIMB WALL LEG:

Shall be fabricated using 1.660" O.D. 11 gauge steel tubing welded to a 1/4" steel mounting plate and 1.315" O.D. 12 gauge steel cross member. A 3/8" steel tab will be welded to cross member. The Grip Climb Wall Leg shall have a multi-stage baked-on powder coat finish.

GRIP RAMP BRACKET:

Shall be two part laser-cut and welded 1/4" steel. The Grip Ramp Bracket shall have a multi-stage baked-on powder coat finish.

RAMP GRIP:

Shall be one piece precision die-cast from a high strength aluminum alloy. The Ramp Grip comes in 2-hole and 3-hole styles and finished with vinyl coating.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



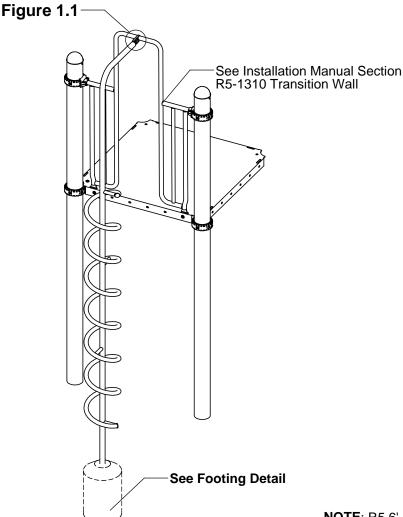
SPIRAL CLIMBER R5 INSTALLATION INSTRUCTIONS

R5-1223 Page 1 of 3

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) Refer to Installation Manual for R5-1310 Transition Wall installation instructions
- **(D)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1 Spiral Climber



NOTE: R5 6' H Spiral Climber shown. Other configurations will vary slightly, but does not affect assembly.

SPIRAL CLIMBER R5 INSTALLATION INSTRUCTIONS

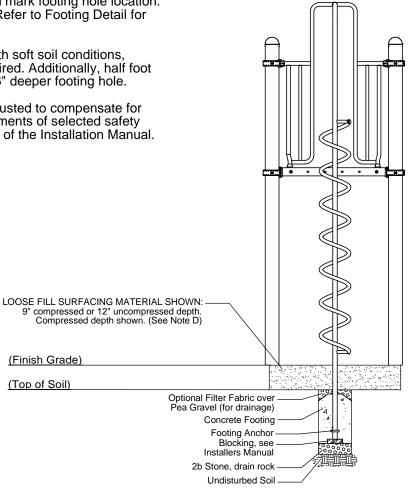
R5-1223 Page 2 of 3

Step 1

Refer to Footing Layout and mark footing hole location. Dig (1) Ø 12" footing hole. Refer to Footing Detail for depth and details.

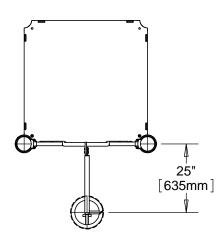
IMPORTANT: For areas with soft soil conditions, larger footings may be required. Additionally, half foot deck heights will require a 6" deeper footing hole.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual. **Footing Detail**



Top View - Footing Layout

(Finish Grade) (Top of Soil)



SPIRAL CLIMBER R5 INSTALLATION INSTRUCTIONS

R5-1223 Page 3 of 3

Step 2

Attach Transition Wall to deck. Place Spiral Climber into footing hole and attach to Transition Wall as shown in Figure 1.1. (See Notes A, B & C)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 4

Plumb and level entire component. Pour concrete into footing hole. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 5

Place required protective surfacing under and around Spiral Climber. (See Note D)

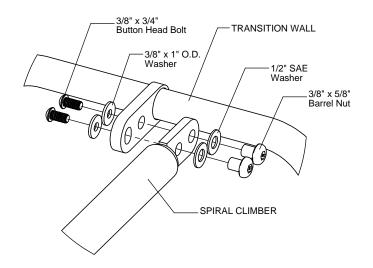


Figure 1.1

Parts List

Part #	DESCRIPTION	QTY
Varies	Spiral Climber R5	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	2
9345002	Washer Flat SAE 1/2"	2
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2

Specifications

SPIRAL CLIMBER R5:

Shall be fabricated using 1.660" O.D. 11 gauge steel tubing with welded 1.315" O.D. 12 gauge steel coil, 1.029" O.D. 14 gauge steel stand-offs, and 3/16" thick steel mounting tab. The Spiral Climber R5 shall have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



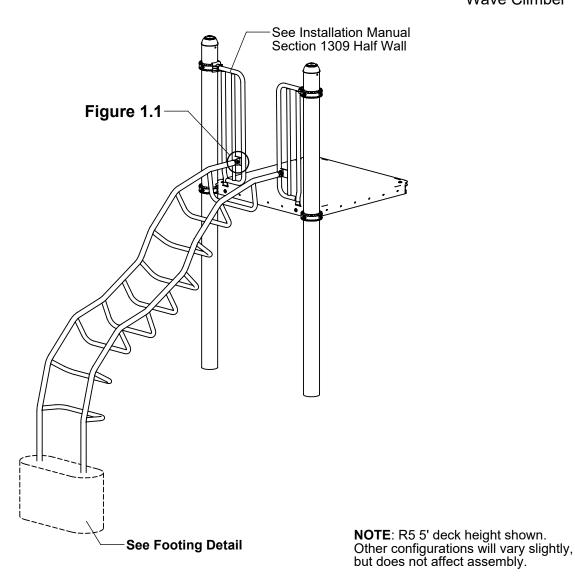
WAVE CLIMBER INSTALLATION INSTRUCTIONS

1225 Page 1 of 3

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) Refer to Installation Manual for 1309 Half Wall assembly instructions.
- **(D)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Wave Climber





WAVE CLIMBER INSTALLATION INSTRUCTIONS

LOOSE FILL SURFACING MATERIAL SHOWN: 9" compressed or 12" uncompressed depth. Compressed depth shown. (See Note D)

Optional Filter Fabric over Pea Gravel (for drainage)

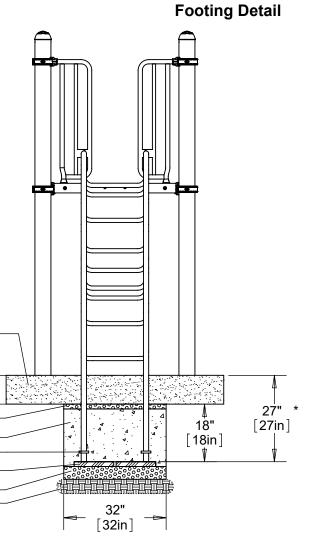
Concrete Footing

Footing Anchor Blocking, see Installers Manual 2b Stone, Drain Rock Undisturbed Soil 1225 Page 2 of 3

Step 1Refer to Footing Layout and mark footing hole location. Dig (1) 12" x 32" footing hole. Refer to Footing Detail for depth and details.

IMPORTANT: For areas with soft soil conditions, larger footings may be required. Additionally, half foot deck heights will require a 6" shallower footing hole.

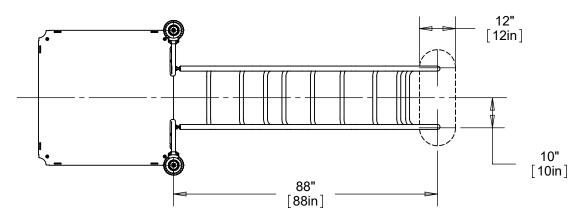
* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.



Top View - Footing Layout

(Finish Grade)

(Top of Soil)



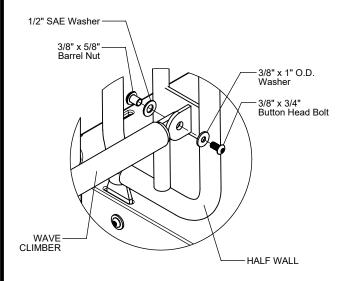


Figure 1.1

Step 2

Attach Half Walls to deck. Place Wave Climber into footing hole and attach to the Half Wall as shown in Figure 1.1. (See Notes A & C)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 4

Plumb and level entire component. Pour concrete into footing hole. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 5

Place required protective surfacing under and around Wave Climber. (See Note D)

Parts List

R3.5 WAVE CLIMBER				
Part #	DESCRIPTION	QTY		
FS-1225	Wave Climber	1		
FS-1225-R35MT	Wave Climber Half Wall R3.5	2		
HS-1001-R35	Socket Clamp Set R3.5	2		
9103032-TR	Bolt Button Head 3/8" x 3/4"	2		
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2		
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6		
9345002	Washer Flat SAE 1/2"	2		
9413002	Nut Lock 3/8"	2		
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2		
		•		

R5 WAVE CLIMBER				
Part #	DESCRIPTION	QTY		
FS-1225	Wave Climber	1		
FS-1225-RMT	Wave Climber Half Wall R5	2		
HS-1001-R5	Socket Clamp Set R5	2		
9103032-TR	Bolt Button Head 3/8" x 3/4"	2		
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2		
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6		
9345002	Washer Flat SAE 1/2"	2		
9413002	Nut Lock 3/8"	2		
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2		

Specifications

WAVE CLIMBER:

Shall be fabricated from \emptyset 1.660" 11 gauge steel tubing with welded \emptyset 1.315" 12 gauge steel rungs and will have a multi-stage baked-on powder coat finish.

WAVE CLIMBER HALF WALL:

Shall be fabricated from Ø 1.315" 12 gauge steel tubing and welded Ø 1.029" 14 gauge steel vertical rail, 1/4" steel plate and 1/4" steel tab and will have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

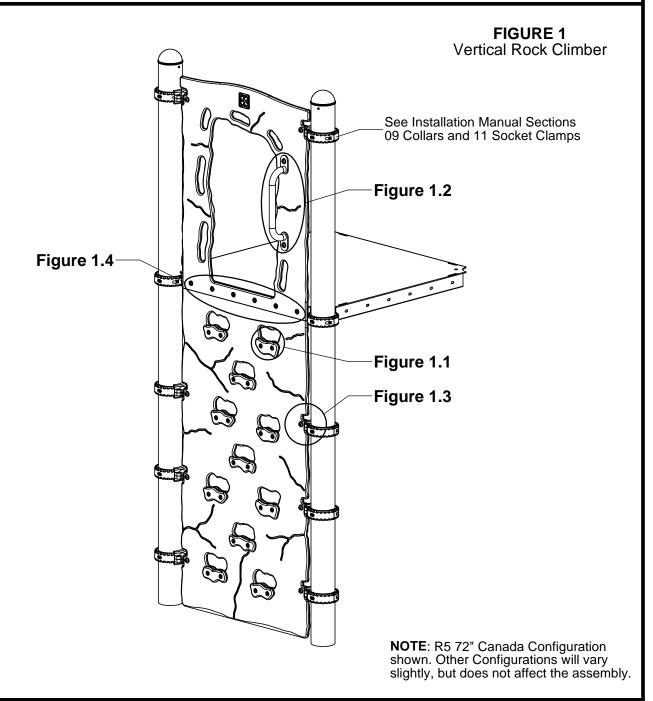
Maintenance

VERTICAL ROCK CLIMBER

1237 Page 1 of 5

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps assembly instructions.



VERTICAL ROCK CLIMBER

1237 Page 2 of 5

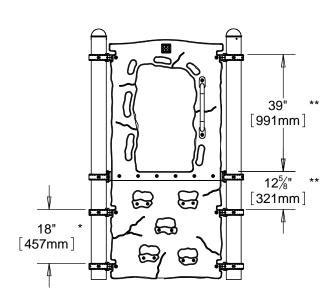


FIGURE 2 36" Vertical Rock Climber

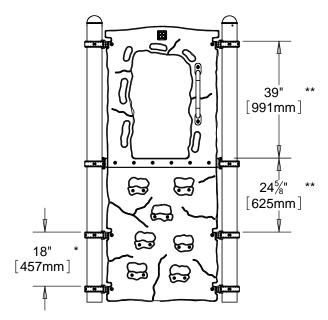


FIGURE 3 48" Vertical Rock Climber

* Top of Collar to Top of Collar ** Top of Deck to top of Collar

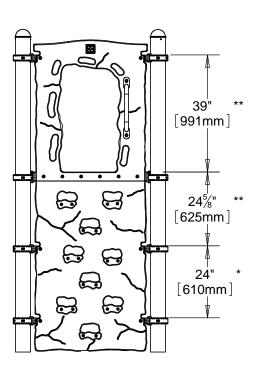


FIGURE 4 60" Vertical Rock Climber

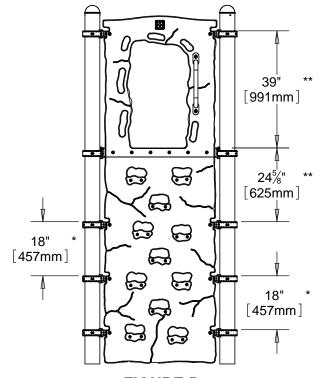


FIGURE 5
72" Vertical Rock Climber



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VERTICAL ROCK CLIMBER

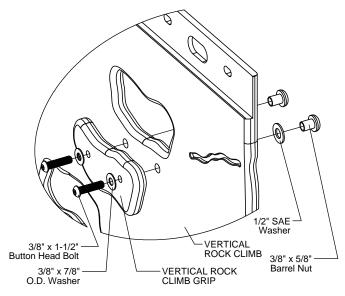


Figure 1.1

Step 2

Attach the Vertical Rock Climber Handle to the Vertical Rock Climb Entry Panel as shown in Figure 1.2. (See Note A)

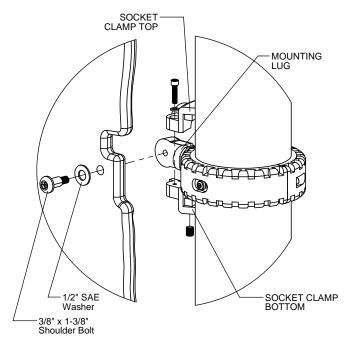


Figure 1.3

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Step 1 (Factory Assembled)

Attach the Vertical Rock Climb Grips to their corresponding slot on the Vertical Rock Climber Panel as shown in Figure 1.1. (See Note A)

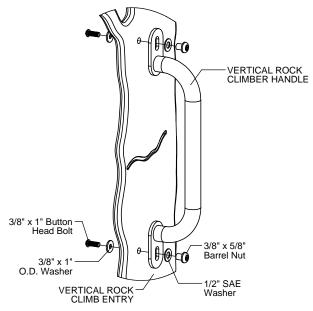


Figure 1.2

Step 3

Attach the collars at the heights shown on Page 2 for your climber height. (See Note A and Note B)

Step 4

Attach the Vertical Rock Climber Panel and Vertical Rock Climber Entry Panel to the posts as shown in Figure 1.3. (See Note A and Note B)

Step 5

Attach the Vertical Rock Climber Panel and Vertical Rock Climber Entry Panel to the Deck as shown in Figure 1.4. (See Note A)

Step 6

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

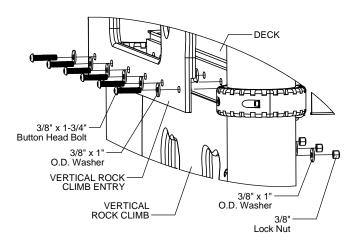


Figure 1.4

Parts List

36" Parts List		
Part #	DESCRIPTION	QTY.
FS-1237	Vertical Rock Climber Handle	1
HS-1001-R5	Socket Clamp Set R5	6
Varies	Mounting Lug	6
Varies	Vertical Rock Climb Entry	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	14
9345002	Washer Flat SAE 1/2"	8
9413002	Nut Lock 3/8"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2

48" Parts List		
Part #	DESCRIPTION	QTY.
FS-1237	Vertical Rock Climber Handle	1
HS-1001-R5	Socket Clamp Set R5	6
Varies	Mounting Lug	6
Varies	Vertical Rock Climb Entry	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	14
9345002	Washer Flat SAE 1/2"	8
9413002	Nut Lock 3/8"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2

36" Assembled Parts List		
Part #	DESCRIPTION	QTY.
EE-8197-G1	Vertical Rock Climb Grip - 1	1
EE-8197-G2	Vertical Rock Climb Grip - 2	1
EE-8197-G3	Vertical Rock Climb Grip - 3	1
EE-8197-G4	Verticl Rock Climb Grip - 4	2
Varies	Vertical Rock Climb 36"	1
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	10
9333042	Washer Flat 3/8" x 7/8" O.D.	10
9345002	Washer Flat SAE 1/2"	10
9443022-TR	Nut Barrel 3/8" x 5/8" BH	10

	48" Assembled Parts List	
Part #	DESCRIPTION	QTY.
EE-8197-G1	Vertical Rock Climb Grip - 1	1
EE-8197-G2	Vertical Rock Climb Grip - 2	1
EE-8197-G3	Vertical Rock Climb Grip - 3	1
EE-8197-G4	Verticl Rock Climb Grip - 4	3
EE-8197-G5	Vertical Rock Climb Grip - 5	1
Varies	Vertical Rock Climb 48"	1
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	14
9333042	Washer Flat 3/8" x 7/8" O.D.	14
9345002	Washer Flat SAE 1/2"	14
9443022-TR	Nut Barrel 3/8" x 5/8" BH	14

Parts List

60" Parts List		
Part #	DESCRIPTION	QTY.
FS-1237	Vertical Rock Climber Handle	1
HS-1001-R5	Socket Clamp Set R5	6
Varies	Mounting Lug	6
Varies	Vertical Rock Climb Entry	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	14
9345002	Washer Flat SAE 1/2"	8
9413002	Nut Lock 3/8"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2

72" Parts List		
Part #	DESCRIPTION	QTY.
FS-1237	Vertical Rock Climber Handle	1
HS-1001-R5	Socket Clamp Set R5	8
Varies	Mounting Lug	8
Varies	Vertical Rock Climb Entry	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	8
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	14
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	6
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2

60" Assembled Parts List		
Part #	DESCRIPTION	QTY.
EE-8197-G1	Vertical Rock Climb Grip - 1	1
EE-8197-G2	Vertical Rock Climb Grip - 2	1
EE-8197-G3	Vertical Rock Climb Grip - 3	3
EE-8197-G4	Verticl Rock Climb Grip - 4	3
EE-8197-G5	Vertical Rock Climb Grip - 5	1
Varies	Vertical Rock Climb 60"	1
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	18
9333042	Washer Flat 3/8" x 7/8" O.D.	18
9345002	Washer Flat SAE 1/2"	18
9443022-TR	Nut Barrel 3/8" x 5/8" BH	18

72" Assembled Parts List		
Part #	DESCRIPTION	QTY.
EE-8197-G1	Vertical Rock Climb Grip - 1	1
EE-8197-G2	Vertical Rock Climb Grip - 2	2
EE-8197-G3	Vertical Rock Climb Grip - 3	3
EE-8197-G4	Verticl Rock Climb Grip - 4	4
EE-8197-G5	Vertical Rock Climb Grip - 5	1
Varies	Vertical Rock Clib 72"	1
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	22
9333042	Washer Flat 3/8" x 7/8" O.D.	22
9345002	Washer Flat SAE 1/2"	22
9443022-TR	Nut Barrel 3/8" x 5/8" BH	22

Specifications

VERTICAL ROCK CLIMBER HANDLE:

Shall be fabricated from Ø 1.315" 12 gauge tubing welded to 1/4" Steel tabs. Handle shall have a multi-stage baked-on powder coat finish.

VERTICAL ROCK CLIMBER PANELS:

Shall be made from high density 3/4" thick hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color retention.

MOUNTING LUGS:

Shall be precision die-cast from a high-strength aluminum alloy. The Mounting Lugs have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

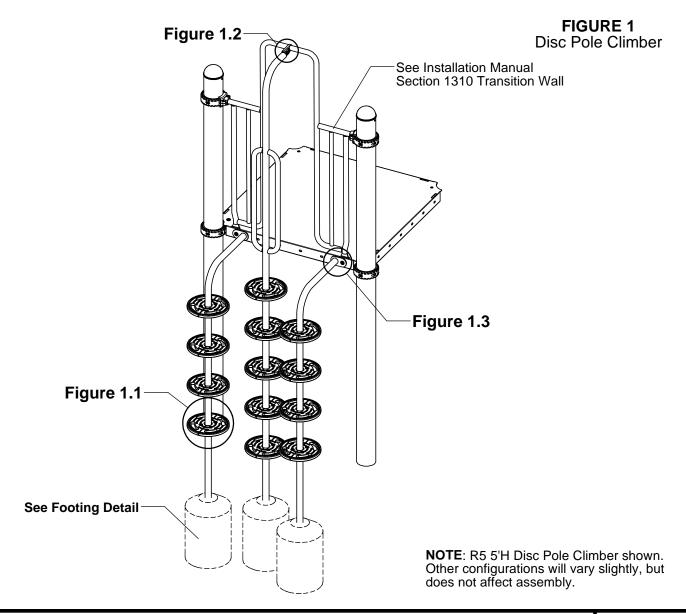
Maintenance



1243 Page 1 of 4

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) Refer to Installation Manual for 1310 Transition Wall installation instructions.
- **(D)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.



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Step 1

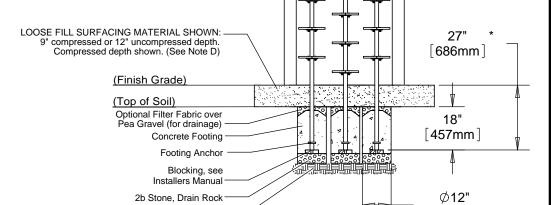
Footing Detail

[305mm]

Refer to Footing Layout and mark footing hole locations. Dig (3) \varnothing 12" footing holes. Refer to Footing Detail for depth and details.

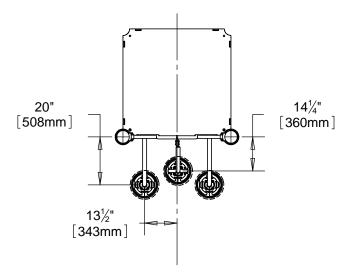
IMPORTANT: For areas with soft soil conditions, larger footings may be required. Additionally, half foot deck heights will require 6" deeper footing holes.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.



Undisturbed Soil

Top View - Footing Layout





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Step 2 (Factory Assembled)

Attach Half Discs to Traverse Disc Plates as shown in Figure 1.1. (See Note A)

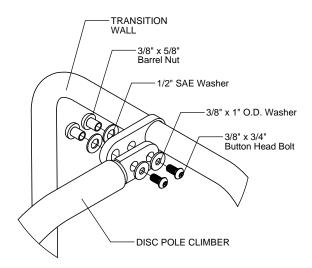


Figure 1.2

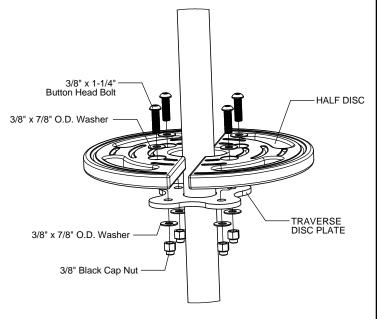


Figure 1.1

Step 3

Attach Transition Wall to deck. Place Disc Pole Climber into footing hole and attach to Transition Wall as shown in Figure 1.2. (See Notes A, B & C)

Step 4

Place Side Rails into appropriate footing hole and attach to deck as shown in Figure 1.3. (See Note A)

Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 6

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 7

Place required protective surfacing under and around Disc Pole Climber. (See Note D)

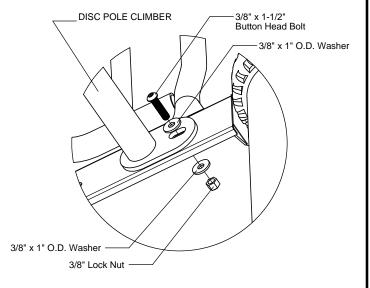


Figure 1.3



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Parts List

Part #	DESCRIPTION	QTY
9103032-TR	Bolt Button Head 3/8" x 3/4"	2
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	2
9413002	Nut Lock 3/8"	2
9443022-TR	Nut Barrel 3/8" x 5/8" BH	2

Assembled Parts List

3' DECK HEIGHT		
Part #	DESCRIPTION	QTY
EE-4659	Disc Pole Climber Half Disc	14
FS-1243-3CTR	Disc Pole Climber 36" - Center Pole	1
FS-1243-3SIDE	Disc Pole Climber 36" - Side Pole	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	28
9333042	Washer Flat 3/8" x 7/8" O.D.	56
9413162-BLK	Nut Lock 3/8" w/ Black Cap	28

4' DECK HEIGHT		
Part #	DESCRIPTION	QTY
EE-4659	Disc Pole Climber Half Disc	20
FS-1243-4CTR	Disc Pole Climber 48" - Center Pole	1
FS-1243-4SIDE	Disc Pole Climber 48" - Side Pole	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	40
9333042	Washer Flat 3/8" x 7/8" O.D.	80
9413162-BLK	Nut Lock 3/8" w/ Black Cap	40

5' DECK HEIGHT		
Part #	DESCRIPTION	QTY
EE-4659	Disc Pole Climber Half Disc	26
FS-1243-5CTR	Disc Pole Climber 60" - Center Pole	1
FS-1243-5SIDE	Disc Pole Climber 60" - Side Pole	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	52
9333042	Washer Flat 3/8" x 7/8" O.D.	104
9413162-BLK	Nut Lock 3/8" w/ Black Cap	52

6' DECK HEIGHT		
Part #	DESCRIPTION	QTY
EE-4659	Disc Pole Climber Half Disc	32
FS-1243-6CTR	Disc Pole Climber 72" - Center Pole	1
FS-1243-6SIDE	Disc Pole Climber 72" - Side Pole	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	64
9333042	Washer Flat 3/8" x 7/8" O.D.	128
9413162-BLK	Nut Lock 3/8" w/ Black Cap	64

7' DECK HEIGHT		
Part #	DESCRIPTION	QTY.
EE-4659	Disc Pole Climber Half Disc	38
FS-1243-7CTR	Disc Pole Climber 84" - Center Rail	1
FS-1243-7SIDE	Disc Pole Climber 84" - Side Rail	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	76
9333042	Washer Flat 3/8" x 7/8" O.D.	152
9413162-BLK	Nut Lock 3/8" w/ Black Cap	76

Specifications

DISC POLE CLIMBER HALF DISC:

Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

DISC POLE CLIMBER POLES:

Shall be fabricated using 1.660" O.D. 11 gauge steel tubing with welded 1/4" thick steel plates. Disc Pole Climber Poles shall have a baked-on powder-coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



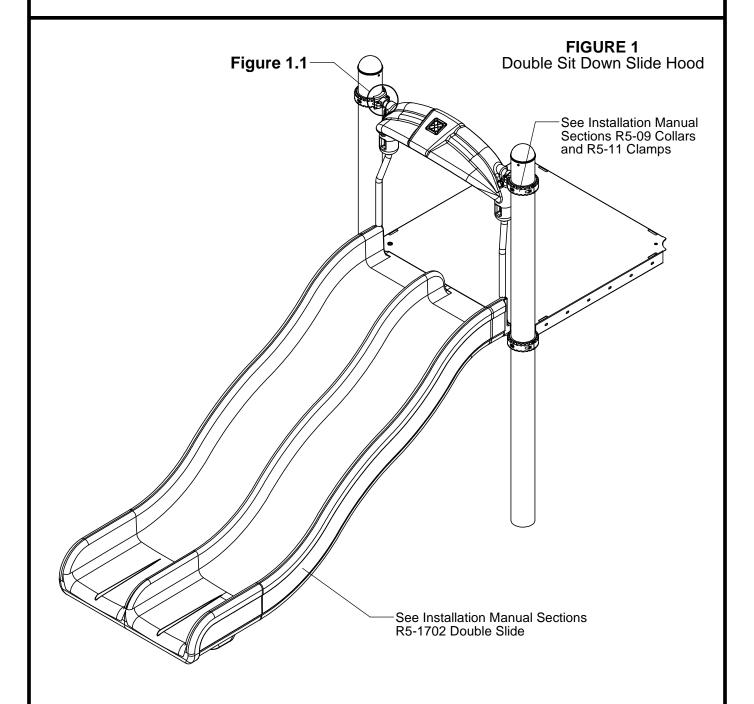
DOUBLE SIT DOWN SLIDE HOOD

R5-1306 Page 1 of 3

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) Refer to Installation Manual for R5-09 Collars, R5-11 Socket Clamps, and R5-1702 Double Slide assembly instructions.



DOUBLE SIT DOWN SLIDE HOOD

R5-1306 Page 2 of 3

Step 1 (Factory Assembled)

Attach Sit Down Hood Bars to the Slide Hood as shown in Figure 2.

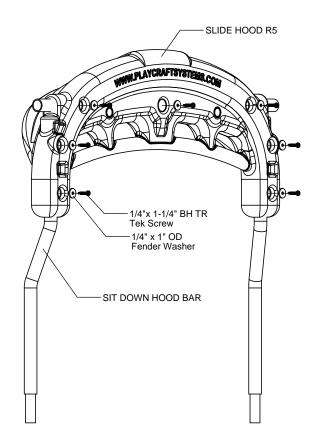


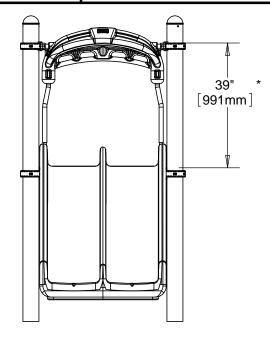
FIGURE 2

Step 3

Insert the Double Sit Down Slide Hood into the Slide and attach Double Sit Down Slide Hood to collars as shown in Figure 1.1 (See Note B).

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.



FRONT ELEVATION

Step 2

Locate and attach collars at the height shown in Front Elevation (See Note B).

* Height shown from top of collar to top of deck

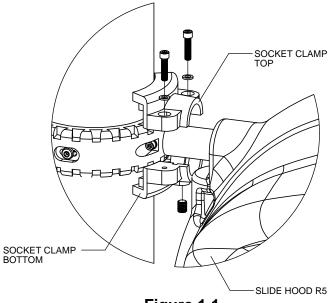


Figure 1.1



DOUBLE SIT DOWN SLIDE HOOD

R5-1306 Page 3 of 3

Specifications

SIT DOWN SLIDE HOOD:

Shall be constructed of UV-stabilized, rotationally molded, linear, low density polyethylene with an average wall thickness of .250".

SIT DOWN SLIDE HOOD - TOP RAIL:

Shall be constructed of 1.315" O.D. 12 gauge steel tubing. Sit Down Hood - Top Rail shall have a multi-stage baked-on powder coat finish.

SIT DOWN HOOD BAR:

Shall be constructed of 1.315" O.D. 12 gauge steel tubing and 1.029" O.D. 14 gauge steel tubing. Sit Down Hood Bar shall have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

Part #	DESCRIPTION	QTY
HS-1001-R5	Socket Clamp Set R5	2

Assembled Parts List

Part #	DESCRIPTION	QTY
DF-4827	Slide Hood R5	1
FS-1306-R5	Sit Down Hood Bar Standard Double	2
LF-0009	Sit Down Hood - Top Rail	1
9271062-TR	Screw Tek 1/4" x 1-1/4" BH TR	7
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	7

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



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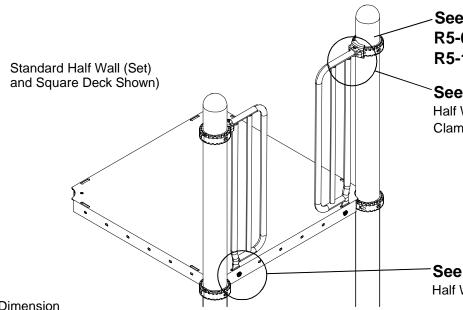
HALF WALL (HANDLE) ASSEMBLY

R5 - 1309 Page 1 of 3

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite [®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** This Assembly requires additional Assembly Pages. See also Assembly Page R5-09 Collars and R5-11 Socket Clamps.
- **(C)** Collar Locations: The Collar is to be placed 39" from top of the collar to top of the deck.

Assembly Views



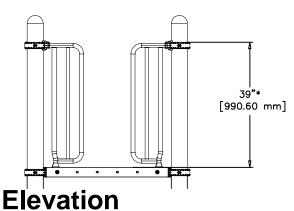
See Assembly Page R5-09 Collars and R5-11 Socket Clamps

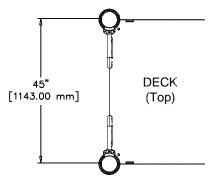
See Figure 2
Half Wall to Socket
Clamp Connection

See Figure 1

Half Wall to Deck Connection

*Dimension given is from Top of Deck to Top of Collar.





Footing Layout

Top View

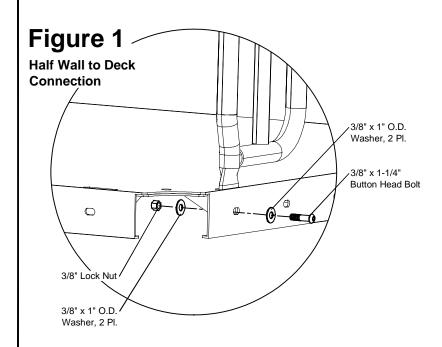


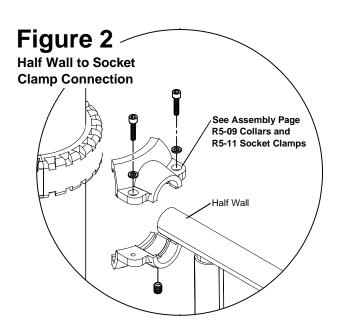
Front View

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HALF WALL (HANDLE) ASSEMBLY

R5 - 1309 Page 3 of 3

Parts List

(1) Half Wall (Handle)

PART#	DESCRIPTION	QTY
-VARIES-	Half Wall	1
See Pg.	Socket Clamp Assembly	1
R5-11		
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	1
9333002	Washer Flat 3/8" x 1" x .100 thick	2
9413002	Nut Lock 3/8"	1

Half Wall Options

PART#

DESCRIPTION

FS-1309-R FS-1309-R-TRNFR FS-1309-RADA Half Wall R5 Half Wall Transfer R5 Half Wall ADA Steps R5

Installation

Step 1.

Locate and mark the position of the Collars on the Support Posts. Refer to Elevation View for Collar locations. See Note C. See also Assembly Page R5 - 09 Collars for hardware type and orientation.

Step 2.

Loosely attach the Half Wall to the Deck. Verify left or right hand location on Top View of structure prior to installation. Refer to Figure 1 for hardware type and orientation.

Step 3.

Loosely attach the Half Wall to the Post Collars using the Socket Clamps. Refer to Figure 2 for hardware type and orientation. See also Assembly Page R5-11 Socket Clamps for additional hardware details.

Step 4.

Apply liquid thread lock and fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" Section of the Installer's Manual. See Note A.

Specifications

HALF WALL R5:

Shall be constructed of 1.315" O.D., 12 gauge steel tubing outer rails with 1.029" O.D., 14 gauge steel tubing welded vertically. The Half Wall may also have welded mounting tabs and/or plates. The Half Wall R5 has a multi-stage baked on powder coat finish.

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



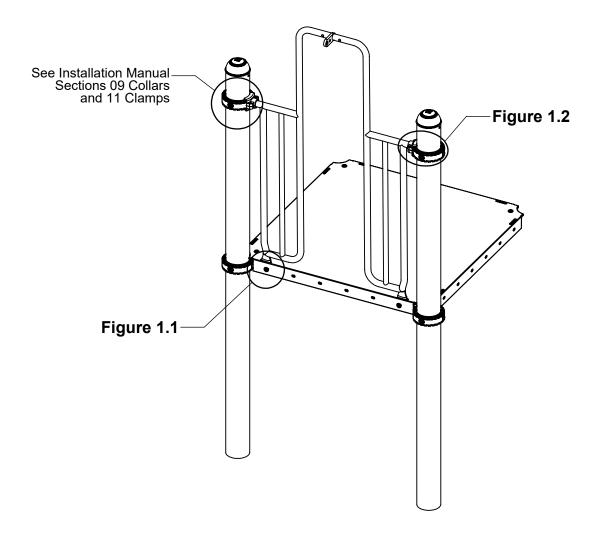
TRANSITION WALL INSTALLATION INSTRUCTIONS

1310 Page 1 of 3

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps assembly instructions.
- **(C)** Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult you surfacing supply representative.

FIGURE 1
Transition Wall



NOTE: R5 Single Tab Transition Wall shown. Other configurations will vary slightly but do not affect assembly.



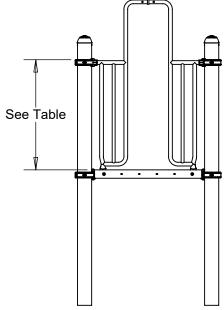
FRONT ELEVATION

Step 1

Locate and attach collars to posts at height shown in Front Elevation. (See Note B)

* Height shown from top of deck to top of collar.

COLLAR HEIGHT *			
Version Standard Metric			
1310-R35/R5	39"	991mm	
1310-R5 JAPAN	45"	1143mm	



3/8" x 1-1/4" **Button Head Bolt** 3/8" x 1" O.D. Washer 3/8" Lock Nut 3/8" x 1" O.D. Washer

Figure 1.1

Step 2

Place Transition Wall Tabs into Deck slots and loosely attach hardware as shown in Figure 1.1. (See Note A)



Attach Transition Wall to posts using Socket Clamps as shown in Figure 1.2. (See Note B)

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

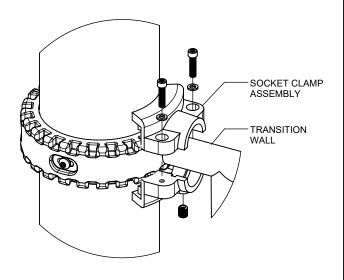


Figure 1.2



TRANSITION WALL INSTALLATION INSTRUCTIONS

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Parts List

R3.5 TRANSITION WALL		
Part #	DESCRIPTION	QTY.
Varies	Transition Wall R3.5	1
HS-1001-R35	Socket Clamp Set R3.5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9413002	Nut Lock 3/8"	2

R5 TRANSITION WALL		
Part #	DESCRIPTION	QTY.
Varies	Transition Wall R5	1
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9413002	Nut Lock 3/8"	2

Specifications

TRANSITION WALL:

Shall be fabricated from 1.315" O.D. 12 guage steel tubing, welded 1.029" O.D. 14 guage vertical rails and handles and 1/2" thick steel tabs and will have a multi-stage baked on powder coat finish.

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy and will have a multi-stage baked on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



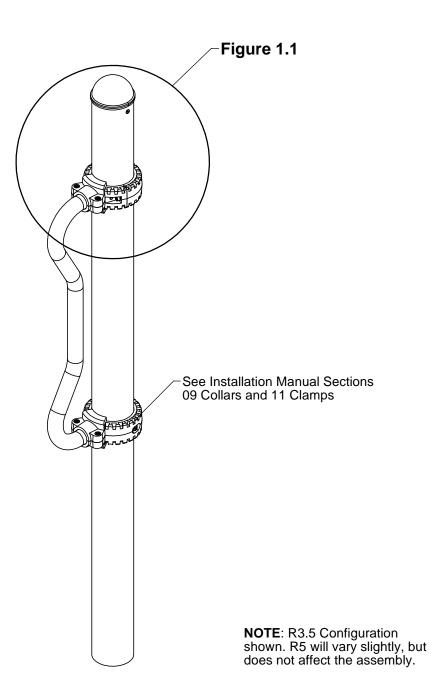
CURVED POST HANDLE

1313 Page 1 of 2

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps assembly instructions.

FIGURE 1 Curved Post Handle





CURVED POST HANDLE

1313 Page 2 of 2

Step 1

Locate collars at height shown in Side Elevation. (See Note B).

Step 2

Attach Curved Post Handle to collars as shown in Figure 1.1. (See Notes A & B)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

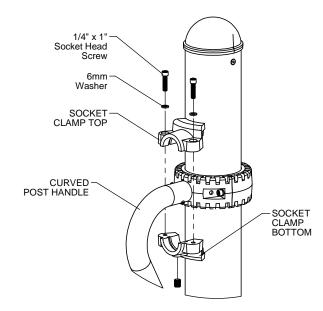
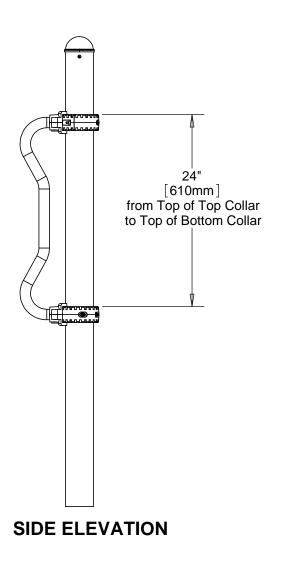


Figure 1.1



R3.5 Parts List

Part #	DESCRIPTION	QTY.
HS-1001-R35	Socket Clamp Set R3.5	2
FS-1313	Curved Post Handle	1

R5 Parts List

Part #	DESCRIPTION	QTY.
HS-1001-R5	Socket Clamp Set R5	2
FS-1313	Curved Post Handle	1

Specifications

CURVED POST HANDLE:

Shall be 1.315" O.D. 12 gauge steel tubing. Handle shall have a multi-stage baked-on powder coat finish.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



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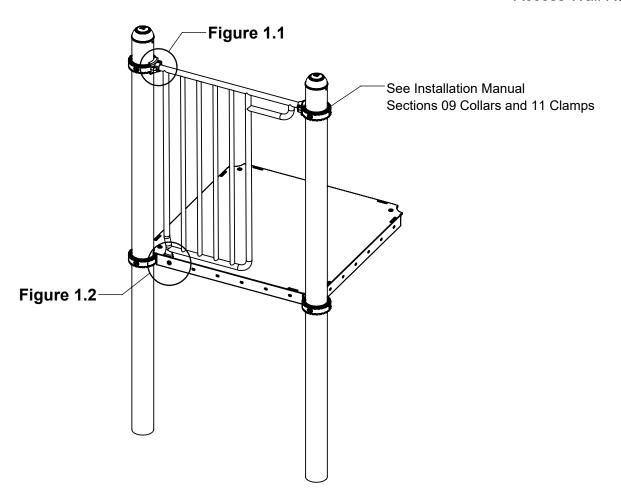
ACCESS WALL R5 INSTALLATION INSTRUCTIONS

R5-1314 Page 1 of 3

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) Refer to Installation Manual for 09 Collars and 11 Socket Clamps.
- **(D)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1 Access Wall R5



NOTE: Access Wall R5 Right Hand shown. Other configurations will vary slightly, but does not affect assembly.

ACCESS WALL R5 INSTALLATION INSTRUCTIONS

R5-1314 Page 2 of 3

Step 1

Locate and attach collars at heights shown in Elevation View. (See Note C)

* Height shown from top of deck to top of collar.

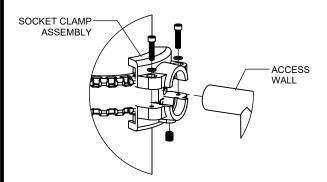


Figure 1.1

Step 3

Attach Wall to Deck as shown in Figure 1.2. (See Note A)

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

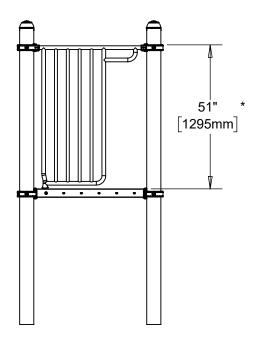
Step 5

Plumb and level entire component. Pour concrete into footing hole(s). Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 6

Place required protective surfacing under and around Access Wall R5. (See Note D)





Step 2

Attach Wall to Collar as shown in Figure 1.1 (See Note C).

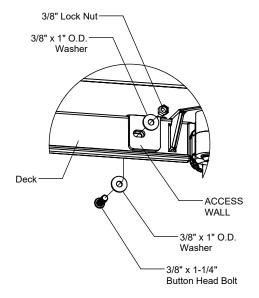


Figure 1.2



ACCESS WALL R5 INSTALLATION INSTRUCTIONS

R5-1314 Page 3 of 3

Parts List

Part #	DESCRIPTION	QTY
FS-1314-R	Access Wall R5	1
HS-1001-R5	Socket Clamp Set R5	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	2
9413002	Nut Lock 3/8"	1

Specifications

R5 ACCESS WALL:

Shall be fabricated from 1.315" O.D. 12 gauge steel tubing with 1.029" O.D. 14 gauge steel tubing and will have a multi-stage baked-on powder coat finish.

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

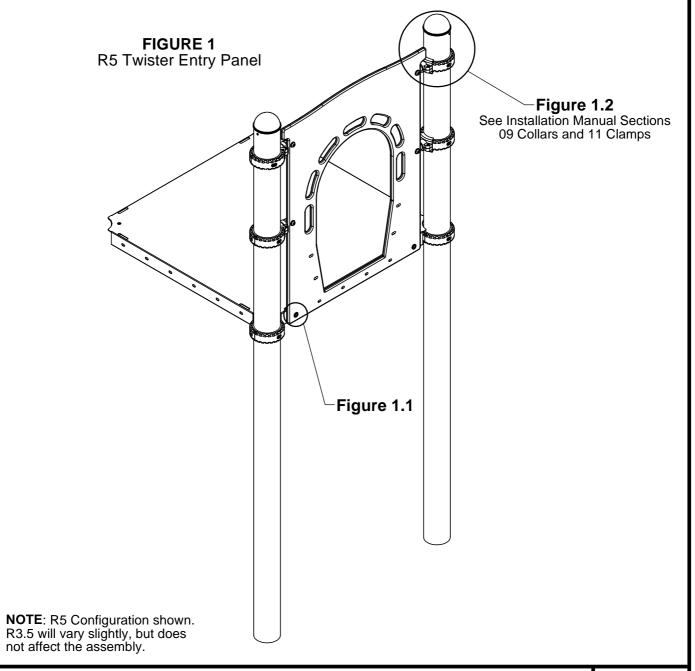


TWISTER ENTRY PANEL

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IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps assembly instructions.





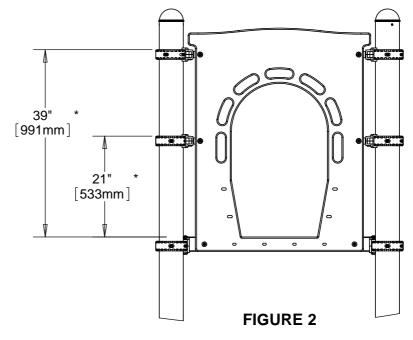
TWISTER ENTRY PANEL

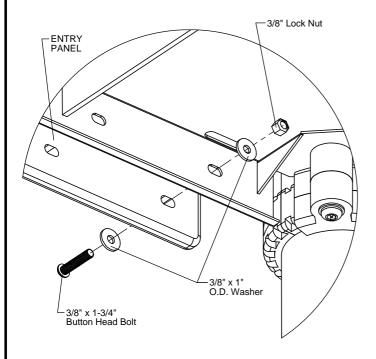
1316 Page 2 of 3

Step 1

Attach collars at heights shown in Figure 2. (See Note B)

* Height shown from top of deck to top of collar.





Step 2

Attach Entry Panel to deck as shown in Figure 1.1. (See Note A)

Figure 1.1

TWISTER ENTRY PANEL

1316 Page 3 of 3

Step 3

Attach Entry Panel to collars as shown in Figure 1.2. (See Notes A and B)

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

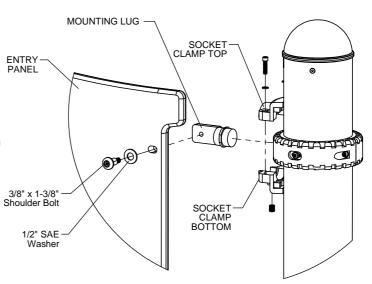


Figure 1.2

Parts List

R5-1316 - Twister Entry Panel R5		
Part #	DESCRIPTION	QTY.
EF-7091	Twister Entry Panel	1
GF-7007	Mounting Lug R5	4
HS-1001-R5	Socket Clamp Set R5	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	2
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9413002	Nut Lock 3/8"	2

R3.5-1316 - Twister Entry Panel R3.5		
Part #	Part # DESCRIPTION	
EG-8196	Twister Sit Down Panel R3.5	1
GG-8113	Mounting Lug R3.5	4
HS-1001-R35	R3.5 Socket Clamp Set	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	2
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9413002	Nut Lock 3/8"	2

Specifications

TWISTER ENTRY PANEL:

Shall be made from high density 3/4" thick hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color retention.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

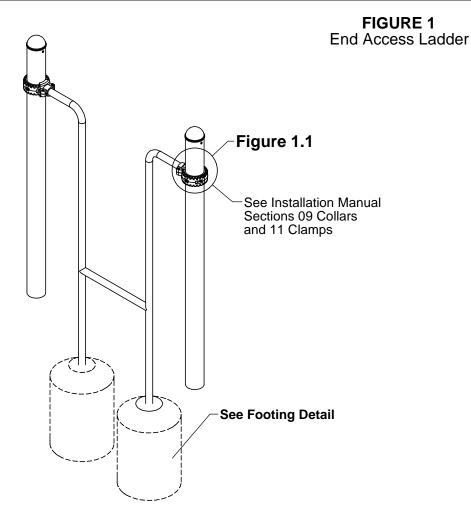


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IMPORTANT NOTES: Read First

- (A) Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars & 11 Socket Clamps.
- **(C)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- **(D)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.



NOTE: R3.5 End Access Ladder shown. Other configurations will vary slightly, but does not affect assembly.

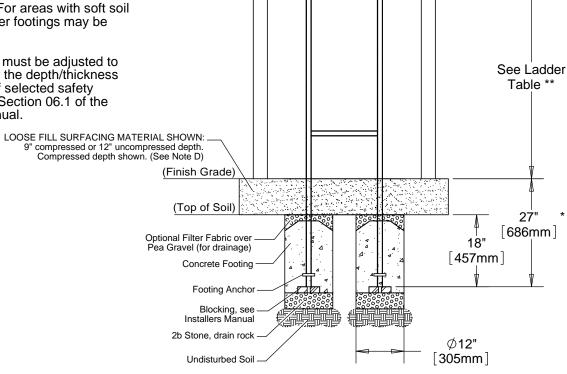


Step 1

Refer to Footing Layout and mark footing hole locations. Dig (2) Ø 12" footing holes. Refer to Footing Detail for depth and details.

IMPORTANT: For areas with soft soil conditions, larger footings may be required.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

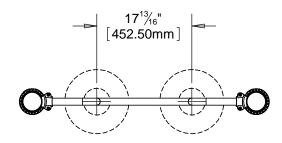


Footing Detail

** Dimensions are from Top of Collar to surfacing.

** Ladder Table			
# of Rungs	Inches	mm	
1 Rung	49"	1245	
2 Rung	61"	1549	
3 Rung	73"	1854	

Top View - Footing Layout



END ACCESS LADDER INSTALLATION INSTRUCTIONS

1400 Page 3 of 3

Step 2

Locate and attach collars to posts at height given in Footing Detail. (See Note B)

Step 3

Place ladder into footing holes and attach to collars as shown in Figure 1.1. (See Note B)

Step 4

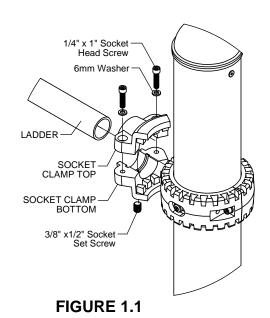
Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 5

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note C)

Step 6

Place required protective surfacing under and around End Access Ladder. (See Note D)



Parts List

S-1401-R35		
Part #	DESCRIPTION	QTY.
FS-1401-R35	End Access Ladder 1-Rung R35	1
HS-1001-R35	Socket Clamp Set R3.5	2

S-1402-R35		
Part #	DESCRIPTION	QTY.
FS-1402-R35	End Access Ladder 2-Rung R35	1
HS-1001-R35	Socket Clamp Set R3.5	2

S-1403-R35		
Part #	DESCRIPTION	QTY.
FS-1403-R35	End Access Ladder 3-Rung R35	1
HS-1001-R35	Socket Clamp Set R3.5	2

S-1401-R		
Part #	DESCRIPTION	QTY.
FS-1401-R	End Access Ladder 1-Rung R5	1
HS-1001-R5	Socket Clamp Set R5	2

S-1402-R		
Part #	DESCRIPTION	QTY.
FS-1402-R	End Access Ladder 2-Rung R5	1
HS-1001-R5	Socket Clamp Set R5	2

S-1403-R		
Part #	DESCRIPTION	QTY.
FS-1403-R	End Access Ladder 3-Rung R5	1
HS-1001-R5	Socket Clamp Set R5	2

Specifications

END ACCESS LADDER:

Shall be fabricated using 1.315" OD, 12 gauge steel tubing. End Access Ladder shall have a multi-stage baked-on powder coat finish.

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:

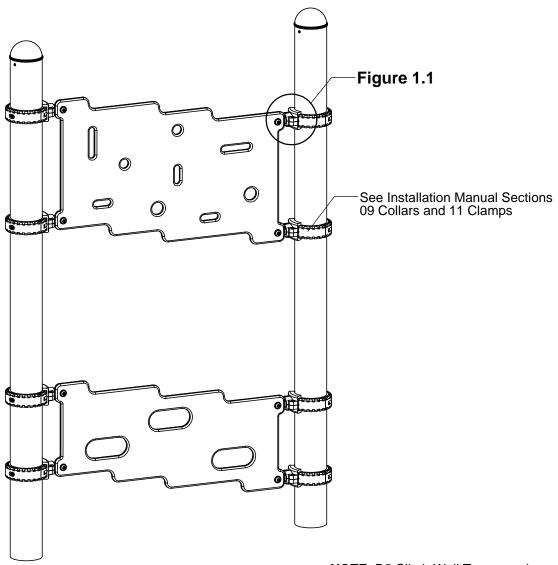
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps assembly instructions.
- **(C)** Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1 Climb Wall Traverse



NOTE: R5 Climb Wall Traverse shown. Other configurations will vary slightly, but does not affect assembly.

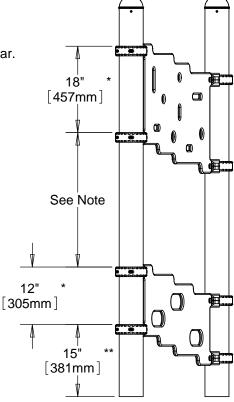
Step 1

Locate and attach collars at heights given in Collar Layout. (See Note B)

- * Height given is from top of collar to top of collar.
- ** Maximum height given is from finish grade to top of collar.

NOTE: Distance between collars must be greater than 14" [356mm] and less than 28" [711mm].

Collar Layout



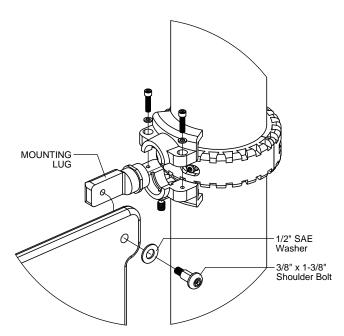


Figure 1.1

Step 2

Attach Climb Wall Panels to collars as shown in Figure 1.1. (See Notes A & B)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 4

Place appropriate compliant protective surfacing under and around Climb Wall Traverse. (See Note C)

Parts List

R3.5 ASSEMBLY		
Part #	DESCRIPTION	QTY
EE-4071	Climb Panel #1	1
EE-4072	Climb Panel #2	1
GG-8113	Mounting Lug R3.5	8
HS-1001-R35	Socket Clamp Set R3.5	8
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	8
9345002	Washer Flat SAE 1/2"	8

R5 ASSEMBLY		
Part #	DESCRIPTION	QTY
EE-4071	Climb Panel #1	1
EE-4072	Climb Panel #2	1
GF-7007	Mounting Lug R5	8
HS-1001-R5	Socket Clamp Set R5	8
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	8
9345002	Washer Flat SAE 1/2"	8

R5 CANADA ASSEMBLY		
Part #	DESCRIPTION	QTY
EE-4071	Climb Panel #1	1
EE-4072	Climb Panel #2	1
GG-8113	Mounting Lug R3.5	8
HS-1001-R5	Socket Clamp Set R5	8
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	8
9345002	Washer Flat SAE 1/2"	8

Specifications

CLIMB PANEL:

Shall be made from high density 3/4" thick hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color retention.

MOUNTING LUGS:

Shall be precision die-cast from a high-strength aluminum alloy. The Mounting Lugs have a multistage baked-on powder coat finish.

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:

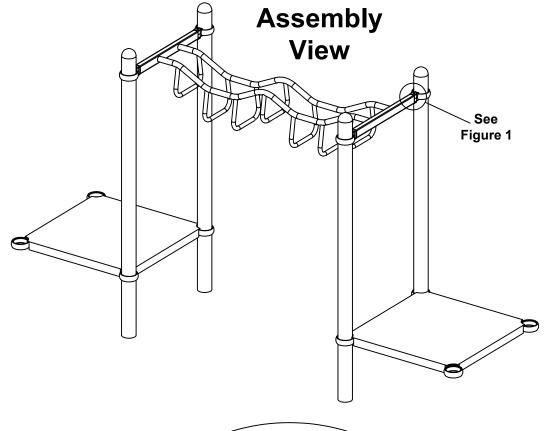
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

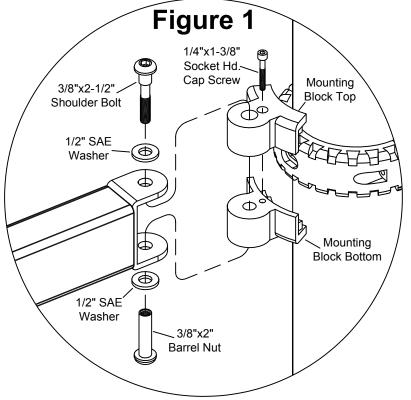
Maintenance



SERPENT TRAVERSE ASSEMBLY

R5-1418 Page 1 of 2





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Rev. B

SERPENT TRAVERSE ASSEMBLY

R5-1418 Page 2 of 2

Parts List

QTY.	DESCRIPTION	PART#
1	Serpent Traverse	FS-1418-R
4	Mounting Block Top	7006-T
4	Mounting Block Bottom	7006-B
4	3/8"x2-1/2" Shoulder Bolts	9143112-TR
4	1/4"x1-3/8" Socket Cap Screws	9281062-5
8	1/2" SAE Washers	9345002
4	3/8"x2" Barrel Nuts	9443092-TR

Specifications

SERPENT TRAVERSE:

Shall be made from 1.90" OD, 11 gage steel tubing welded between 1.5"x3" cross members. Rungs shall be made from 1.315" OD, 12 gage steel tubing. Finished with a baked on powder coating.

MOUNTING BLOCKS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. finished with a baked on powder coating.

HARDWARE:

Shall be zinc/nickel plated, galvanized or stainless steel as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately.

Installation

Notes:

(A) The height of the rungs (at grasping point) from the top of ground cover varies by age group. Ages 2-5: Max. 60" above ground cover. Ages 5-12: Max. 84" above ground cover.

(B) Use liquid thread lock (such as Loctite) with all threaded hardware. *Important:* Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

Step 1.

Locate and mark the positions of the collars on the support posts and attach as shown in Collar Assembly Page R5-09.

Step 2

Place Mounting Blocks in position on the collars and secure with Socket Head Cap Screws. Attach Serpent Traverse to Mounting Blocks as shown in Figure 1.

Step 3.

Check to ensure that the Traverse has been installed to the correct height (see Note A).

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Step 4.

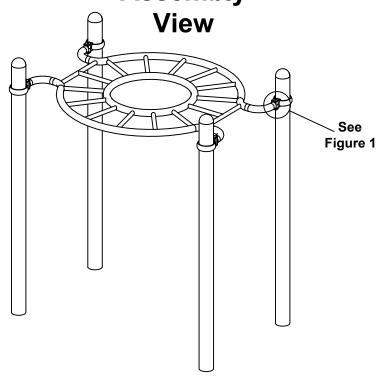
Fully tighten all fasteners.

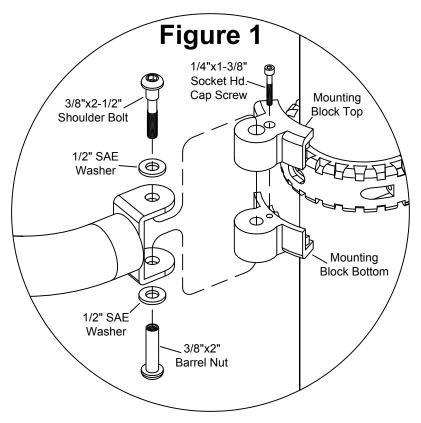


360° HORIZONTAL LADDER ASSY.

R5-1420 Page 1 of 2







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360° HORIZONTAL LADDER ASSY.

R5-1420 Page 2 of 2

Parts List

QTY.	DESCRIPTION	PART#
1	360° Horizontal Ladder	FS-1420
4	Mounting Block Top	7006-T
4	Mounting Block Bottom	7006-B
4	3/8"x2-1/2" Shoulder Bolts	9143112-TF
4	1/4"x1-3/8" Socket Cap Screws	9281062-5
8	1/2" SAE Washers	9345002
4	3/8"x2" Barrel Nuts	9443092-TF

Specifications

360° HORIZONTAL LADDER TRAVERSE:

Shall be made from 2.375" OD, 10 gage steel tubing with welded 1.315" OD, 12 gage steel tube rungs. Finished with a baked on powder coating.

MOUNTING BLOCKS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. finished with a baked on powder coating.

HARDWARE:

Shall be zinc/nickel plated, galvanized or stainless steel as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately.

Installation

Notes:

(A) The height of the rungs (at grasping point) from the top of ground cover varies by age group. Ages 2-5: Max. 60" above ground cover. Ages 5-12: Max. 84" above ground cover.

(B) Use liquid thread lock (such as Loctite) with all threaded hardware. *Important:* Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

Step 1.

Locate and mark the positions of the collars on the support posts and attach as shown in Collar Assembly Page R5-09.

Step 2

Place Mounting Blocks in position on the collars and secure with Socket Head Cap Screws. Attach Horizontal Ladder to Mounting Blocks as shown in Figure 1.

Step 3.

Check to ensure that the Ladder has been installed to the correct height (see Note A).

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Step 4.

Fully tighten all fasteners.



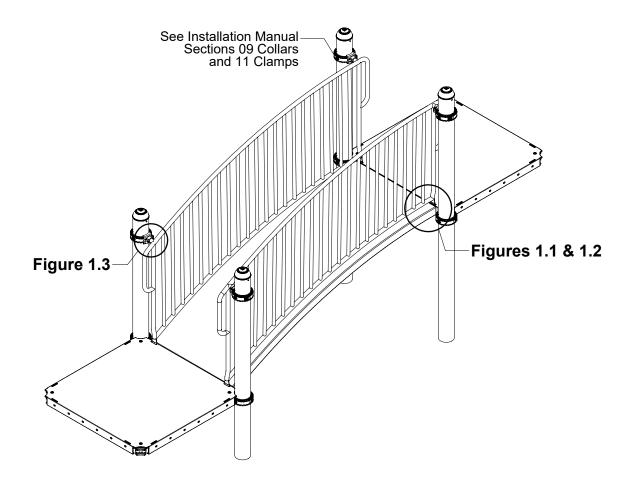
INCLINED ARCH BRIDGE INSTALLATION INSTRUCTIONS

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IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps installation instructions.
- **(C)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Inclined Arch Bridge



NOTE: R5 Inclined Arch Bridge shown. Other configurations will vary slightly.



INCLINED ARCH BRIDGE INSTALLATION INSTRUCTIONS

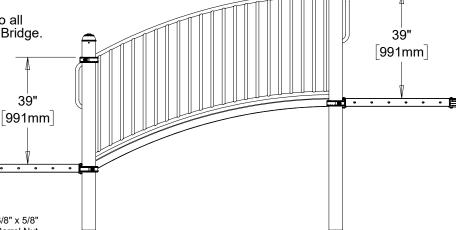
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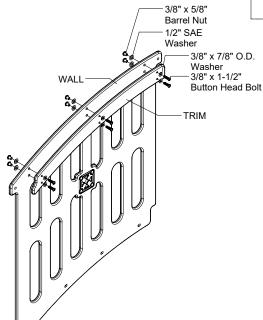
Elevation View

Step 1

Locate and attach collars at heights given in Elevation View. Heights shown from top of deck to top of collar. (See Note B)

Note: Collar heights shown apply to all configurations of the Inclined Arch Bridge.





Step 2 (Factory Assembled) For 42" Version Only

Attach Trim to Walls as shown in Figure 2. (See Note A)

Step 3a

For 45", 84", and 90" Versions Only

Figure 2

Attach Inclined Arch Bridge between decks as shown in Figure 1.1. (See Note A)

Step 3bFor 42" Version Only

Attach Inclined Arch Bridge between decks as shown in Figure 1.1 using all six connection points. (See Note A)

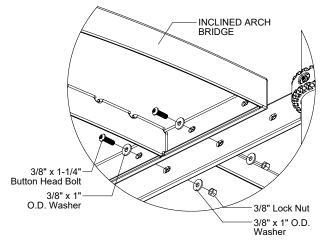


Figure 1.1



INCLINED ARCH BRIDGE INSTALLATION INSTRUCTIONS

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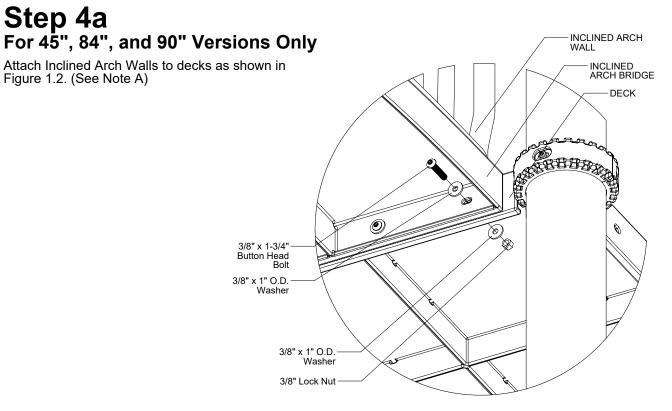
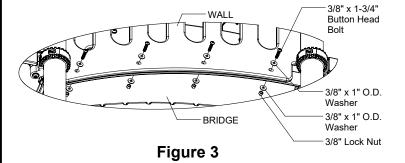


Figure 1.2



Step 4b For 42" Version Only

Attach Walls to Bridge as shown in Figure 3. (See Note A)

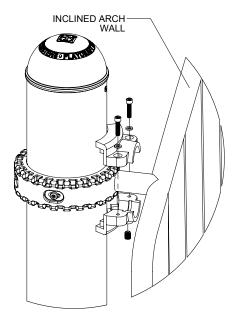


Figure 1.3

Step 5a

For 45", 84", and 90" Versions Only

Attach Inclined Arch Walls to collars as shown in Figure 1.3. (See Notes A & B)

Step 5bFor 42" Version Only

Attach Walls to collars as shown in Figure 4. (See Notes A & B)

Step 6

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 7

Place required protective surfacing under and around Inclined Arch Bridge. (See Note C)

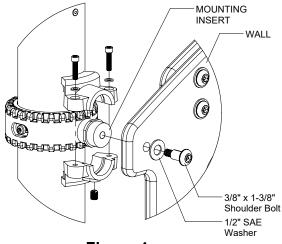


Figure 4

INCLINED ARCH BRIDGE INSTALLATION INSTRUCTIONS

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R3.5 42" Assembled Parts List

Part #	DESCRIPTION	QTY
EG-8211-L	Inclined Arch Bridge Wall - Left Side	1
EG-8211-R	Inclined Arch Bridge Wall - Right Side	1
EG-8211-T	Inclined Arch Bridge Wall - Trim	2
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	12
9333042	Washer Flat 3/8" x 7/8" O.D.	12
9345002	Washer Flat SAE 1/2"	12
9443022-TR	Nut Barrel 3/8" x 5/8" BH	12

R3.5 42" Parts List

Part #	DESCRIPTION	QTY
CG-8200	Inclined Arch Bridge 42" R3.5	1
GE-7015	Mounting Insert	4
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	12
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	8
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	40
9345002	Washer Flat SAE 1/2"	4
9413002	Nut Lock 3/8"	20

R5 45" Parts List

Part #	DESCRIPTION	QTY
CF-7112	Inclined Arch Bridge 45" R5	1
FS-1514-R545	Inclined Arch Wall 45" R5	2
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R3.5 84" Parts List

Part #	DESCRIPTION	QTY
CG-0652	Inclined Arch Bridge 84" R3.5	1
FS-1514-R3584	Inclined Arch Wall 84" R3.5	2
HS-1001-R35	Socket Clamp Set R3.5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5 90" Parts List

Part #	DESCRIPTION	QTY
CF-0500	Inclined Arch Bridge 90" R5	1
FS-1514-R590	Inclined Arch Wall 90" R5	2
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

R5 90" ADA Parts List

Part #	DESCRIPTION	QTY
CF-0500	Inclined Arch Bridge 90" R5	1
FS-1514-R590-ADA	Inclined Arch Wall 90" R5 ADA	2
HS-1001-R5	Socket Clamp Set R5	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	8
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	24
9413002	Nut Lock 3/8"	12

Specifications

INCLINED ARCH BRIDGE:

Shall be fabricated using punched, formed, and welded 12 gauge sheet steel. The Inclined Arch Bridge shall be Play-Tuff™ coated after fabrication.

INCLINED ARCH WALL:

Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1.029" O.D. 14 gauge vertical rails. The Inclined Arch Wall shall have a multi-stage baked-on powder coat finish.

ARCH BRIDGE WALL AND TRIM:

Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



PANEL - TYPE 2 (HDPE)

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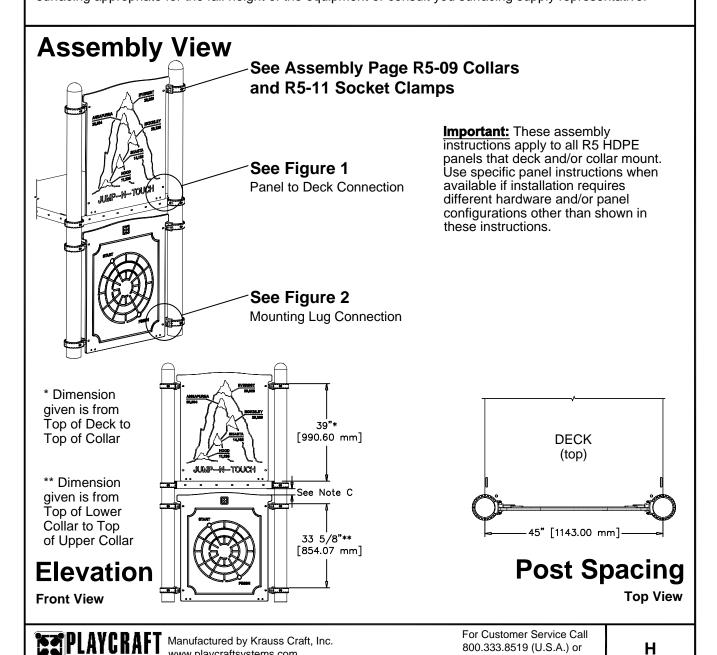
IMPORTANT NOTES: Read First

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- (A) Use liquid thread lock (such as Loctite®) with all threaded hardware. Important: Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) This Assembly requires additional Assembly Pages. See also Assembly Page R5-09 Collars and R5-11 Socket Clamps.
- (C) Collar Locations: Deck Mount Collar measures 39" from top of deck to top of collar. Ground Mount -Collars measure 33-5/8" from top of lower collar to top of upper collar.

Under Deck Installation: Make sure distance between the bottom of the deck and the top of the panel(s) is less than 3-1/2" or greater than 9" to avoid head and neck entrapment.

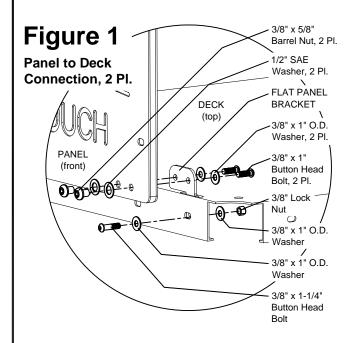
(D) Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication - The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult you surfacing supply representative.

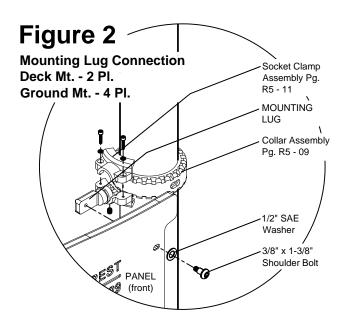


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PANEL - TYPE 2 (HDPE)

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PANEL - TYPE 2 (HDPE)

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Parts List - Deck Mount

PART#	DESCRIPTION	QTY
-VARIES-	Panel (HDPE)	1
007007	Mounting Lug R5	2
007118	Flat Panel Bracket	2
See Pg.	Socket Clamp Assy.	2
R5 - 11		
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9143062-TR	Shoulder Bolt 3/8" x 1-3/8"	2
9333002	Washer Flat 3/8" x 1" x .100 thick	8
9345002	Washer Flat 1/2" SAE	6
9413002	Nut Lock 3/8"	2
9443022-TR	Nut Barrel 3/8" x 5/8" BH	4

Parts List - Ground Mt.

PART#	DESCRIPTION	QTY.
-VARIES-	Panel (HDPE)	1
007007	Mounting Lug R5	4
See Pg.	Socket Clamp Assy.	4
R5 - 11		
9143062-TF	R Shoulder Bolt 3/8" x 1-3/8"	4
9345002	Washer Flat 1/2" SAE	4

Specifications

PANEL:

Shall be fabricated using 3/4" High Density Polyethylene hot-extruded plastic.

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

MOUNTING LUGS:

Shall be precision die-cast from a high-strength aluminum alloy. The Mounting Lugs have a multi-stage baked-on powder coat finish.

FLAT PANEL BRACKET:

Shall be precision laser-cut from 3/16" sheet steel. The Flat Panel Bracket has a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Installation

Step 1.

Locate and mark the position of the Collars on the Support Posts. Refer to Elevation View for Collar locations. See Note C. See also Assembly Page R5 - 09 Collars for hardware type and orientation.

Step 2. - Deck Mount

Attach the Panel to the deck using the Flat Panel Bracket. Refer to Figure 1 for hardware type and orientation.

Step 3.

Attach the Panel to the Post Collars using the Socket Clamps and Mounting Lugs. Refer to Figure 2 for hardware type and orientation. See also Assembly Page R5-11 Socket Clamps for additional hardware details.

Step 4.

Apply liquid thread lock and fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" Section of the Installer's Manual. See Note A.

Step 5.

Place appropriate compliant protective surfacing under and around Ground Mounted Panels. See Note D.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



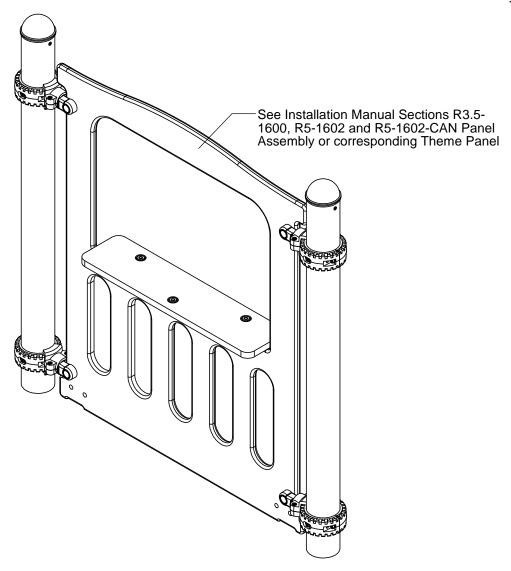
COUNTER ASSEMBLY

1615 Page 1 of 2

IMPORTANT NOTES: Read First

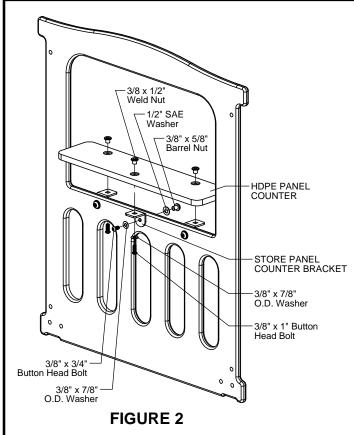
- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Refer to Installation Manual for R3.5-1600, R5-1602 and R5-1602-CAN Panel assembly or corresponding Theme Panel assembly instructions.

FIGURE 1 Counter Assembly



NOTE: R3.5 Store Panel shown. Other panels may vary, but do not affect the Counter Assembly.





Step 1

Attach the HDPE Panel Counter to the Panel as shown in Figure 2. (See Note A)

Step 2

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Specifications

HDPE PANEL COUNTER:

Shall be made from high density 3/4" thick hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color retention.

STORE PANEL COUNTER BRACKET:

Shall be precision laser cut and formed from 3/16" sheet steel. The Store Panel Counter Bracket has a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

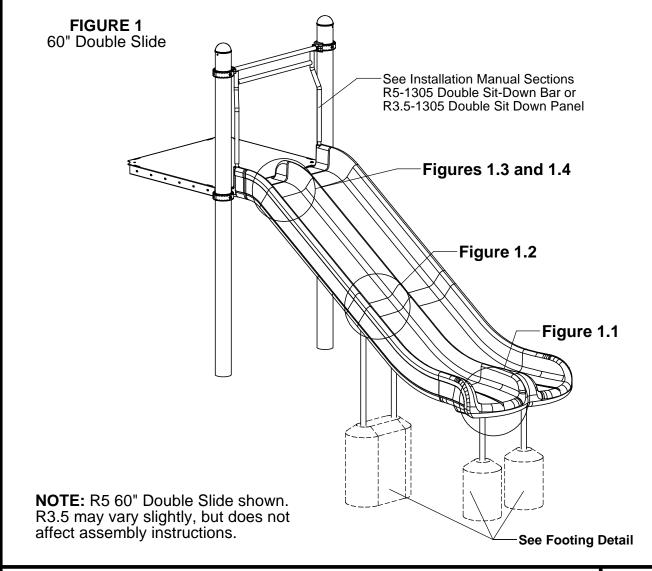
Part #	DESCRIPTION	QTY.
BE-4285	Store Panel Counter Bracket	3
Varies	HDPE Panel Counter	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	3
9103052-TR	Bolt Button Head 3/8" x 1"	3
9333042	Washer Flat 3/8" x 7/8" O.D.	6
9345002	Washer Flat SAE 1/2"	3
9443022-TR	Nut Barrel 3/8" x 5/8" BH	3
9493012	3/8 x 1/2" Weld Nut	3

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) Refer to Installation Manual Section R5-1305 Double Sit Down Bar and R3.5-1305 Double Sit Down Panel.
- **(D)** Exit height must be between 7" [180mm] and 15" [380mm] from finish grade for slides with an elevation greater than 48". For slide elevations no greater than 48", the exit height shall be no greater than 11". Exit region must also have a downward slope of 0 to 4°.
- **(E)** Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult you surfacing supply representative.





Step 1

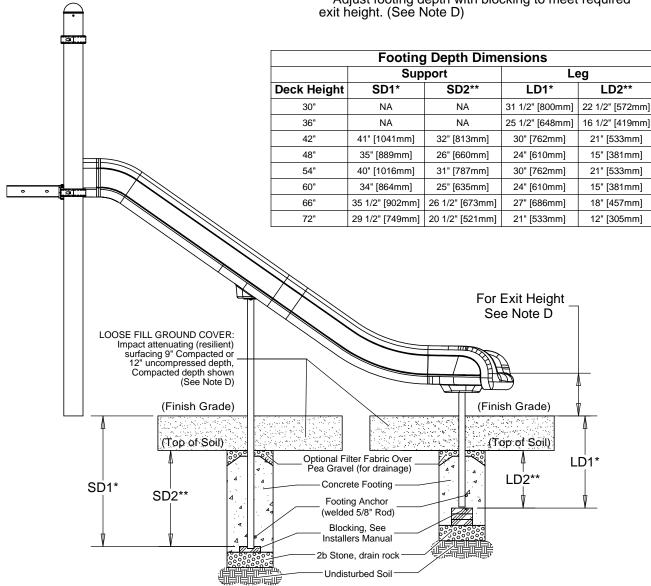
Refer to corresponding Footing Layout and mark footing hole locations. Dig (2) Ø 12" and (1) 12" x 24" footing hole(s). Refer to Footing Detail for depth and details.

Note: For 36" Double Slide dig only (2) Ø 12" footing

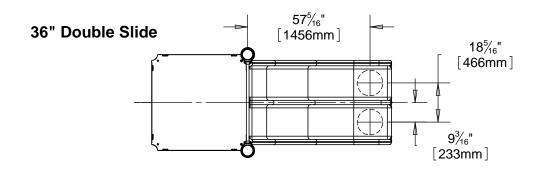
IMPORTANT: For areas with soft soil conditions, larger footings may be required.

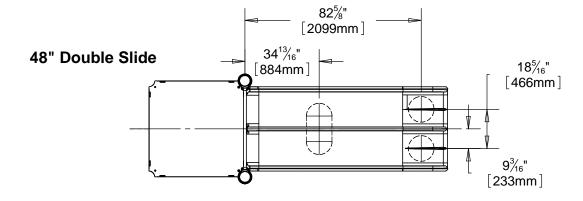
- * Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual
- ** Adjust footing depth with blocking to meet required

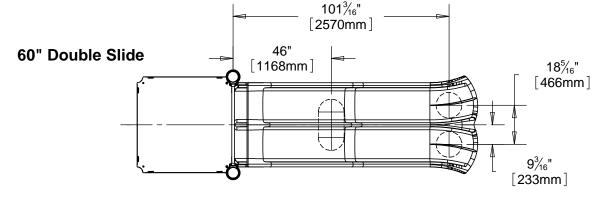
Footing Detail

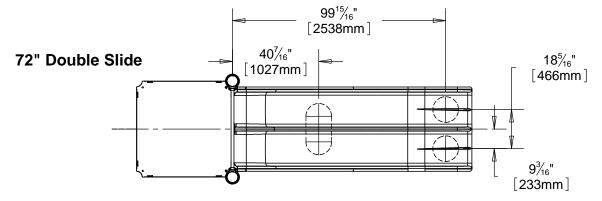


R5 Top View - Footing Layouts

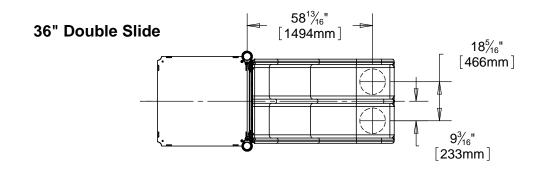


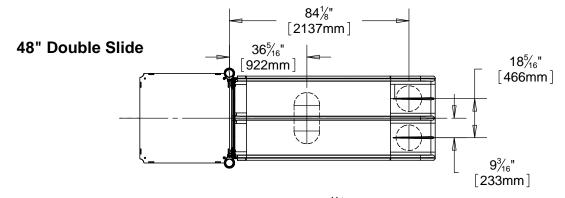


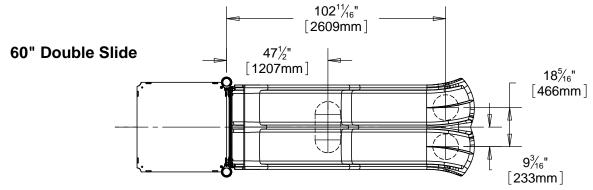


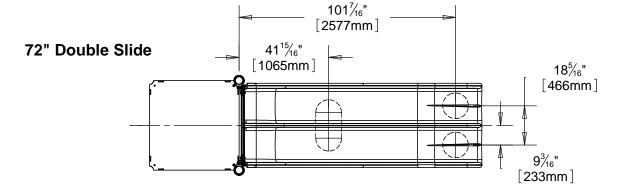


R3.5 Top View - Footing Layouts









DOUBLE SLIDE

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Step 2

Attach Double Slide Leg to the base of the double slide as shown in Figure 1.1. (See Note A)

Step 3

<u>Note:</u> This step does not apply to the 36" Double Slide. Attach slide supports to the double slide as shown in Figure 1.2. (See Note A)

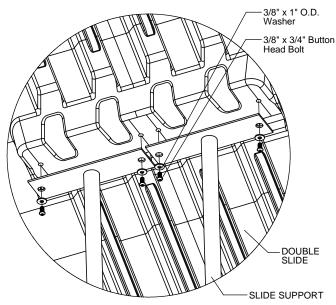
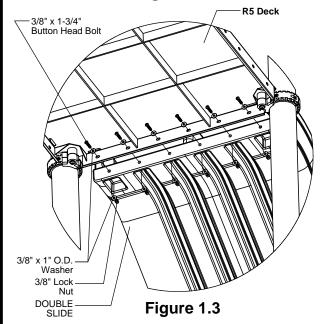


Figure 1.2



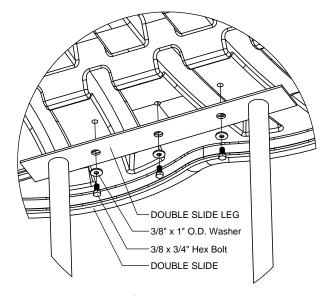


Figure 1.1

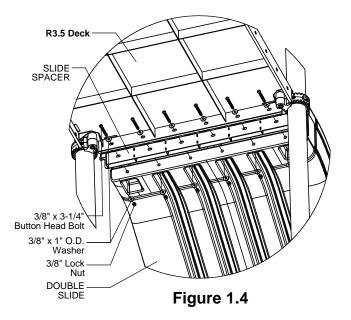
Step 4

For R5 Double Slide only

Place the Double Slide Leg and Supports into the footing holes and attach the face of the double slide to the face of the R5 deck as shown in Figure 1.3. (See Note A)

For R3.5 Double Slide only

Place the Double Slide Leg and Supports into the footing holes and attach the double slide and the R3.5 Double Slide Spacer to the face of the R3.5 deck as shown in Figure 1.4. (See Note A)



Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 6

Plumb and level entire component. Pour concrete into footing hole. Allow at least 72 hours to cure before using this equipment. (See Note B and D)

Step 7

Place appropriate compliant protective surfacing under and around the Double Slide. (See Note E)

Specifications

DOUBLE SLIDE SPACER:

Shall be fabricated using punched and formed 12 gauge sheet Steel. The Double Slide Spacer shall be Play-Tuff™ coated after fabrication.

DOUBLE SLIDE:

Shall be constructed of UV-stabilized, rotationally molded linear low density polyethylene with an average wall thickness of 1/4" with a molded in footing base.

DOUBLE SLIDE LEG:

Shall be fabricated of (2) 1.660" O.D. 11 gauge steel tubing welded onto a 3/16" plate steel with a 5/8" steel rod welded to the base as a footing anchor. The Double Slide Leg has a multi-stage baked-on powder coat finish.

SLIDE SUPPORT:

Shall be fabricated of 1.660" O.D., 11 gauge steel tubing welded onto a 3/16" steel plate with a 5/8" steel rod welded to the base as a footing anchor. The Slide Support has a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

36" Double Slide

R5 Parts List		
Part #	DESCRIPTION	QTY.
DE-4224	Double Slide 36-42	1
FS-1702	Double Slide Leg	1
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	15
9413002	Nut Lock 3/8"	6

R3.5 Parts List			
Part #	DESCRIPTION	QTY.	
CG-8128	Slide Spacer R3.5	1	
DE-4224	Double Slide 36-42	1	
FS-1702	Double Slide Leg	1	
9103142-TR	Bolt Button Head 3/8" x 3-1/4"	6	
9123032	Bolt Hex 3/8" x 3/4"	3	
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	15	
9413002	Nut Lock 3/8"	6	

48" Double Slide

R5 Parts List			
Part #	DESCRIPTION	QTY.	
DE-4400	Wave Slide Double 48	1	
FS-1702	Double Slide Leg	1	
FS-1704	Wave Slide Support	2	
9103032-TR	Bolt Button Head 3/8" x 3/4"	4	
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6	
9123032	Bolt Hex 3/8" x 3/4"	3	
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19	
9413002	Nut Lock 3/8"	6	

R3.5 Parts List		
Part #	DESCRIPTION	QTY.
CG-8128	Slide Spacer R3.5	1
DE-4400	Wave Slide Double 48	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103142-TR	Bolt Button Head 3/8" x 3-1/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

60" Double Slide

R5 Parts List		
Part #	DESCRIPTION	QTY.
DE-4806	60" Doulbe Slide	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

R3.5 Parts List		
Part #	DESCRIPTION	QTY.
CG-8128	Slide Spacer R3.5	1
DE-4806	60" Doulbe Slide	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103142-TR	Bolt Button Head 3/8" x 3-1/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

72" Double Slide

R5 Parts List		
Part #	DESCRIPTION	QTY.
DE-4324	72" Double Slide	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

R3.5 Parts List		
Part #	DESCRIPTION	QTY.
CG-8128	Slide Spacer R3.5	1
DE-4324	72" Double Slide	1
FS-1702	Double Slide Leg	1
FS-1704	Wave Slide Support	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9103142-TR	Bolt Button Head 3/8" x 3-1/4"	6
9123032	Bolt Hex 3/8" x 3/4"	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	19
9413002	Nut Lock 3/8"	6

Maintenance

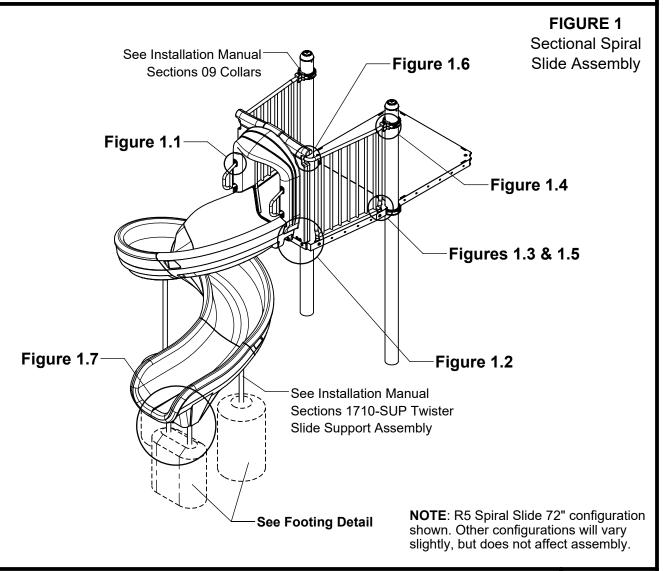
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



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IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) Refer to Installation Manual for 09 Collars, 11 Socket Clamps, and 1710-SUP installation instructions.
- **(D)** For slides with an entry elevation of 48" [1219mm] or greater, the exit height must be between 7" [180mm] and 15" [380mm] from finish grade. For slides with an entry elevation of less than 48" [1219mm], the exit height must be less than 11" [279mm]. Exit region must always have a downward slope between 0° and 4°.
- **(E)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.





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Elevation View - Footing Detail

Step 1

Refer to Footing Layout and mark footing hole locations. Dig (2) \emptyset 18" footing holes and (1) 12" x 24" oval footing hole. Refer to Footing Detail for depth and details.

IMPORTANT: For areas with soft soil conditions, larger footings may be required.

* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

Step 2

Locate and attach collars at heights shown in Elevation View. (See Note C)

LOOSE FILL SURFACING MATERIAL SHOWN: 9" compressed or 12" uncompressed depth. Compressed depth shown. (See Note D)

25"

635mm

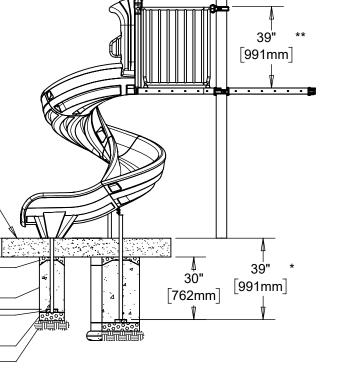
(Finish Grade) (Top of Soil)

Optional Filter Fabric over

Pea Gravel (for drainage)

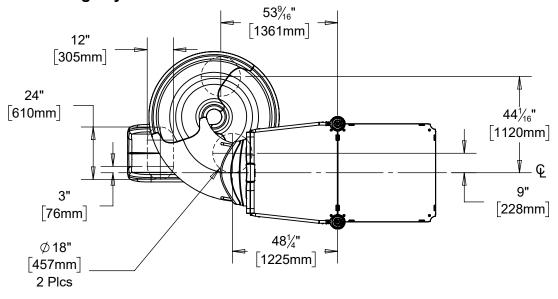
Blocking, see Installers Manual 2b Stone, drain rock Undisturbed Soil

** Height shown from top of deck to top of collar.



Top View - Footing Layout 72"

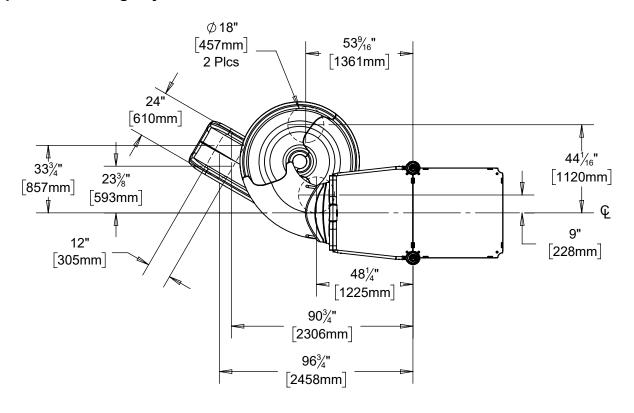
864mm



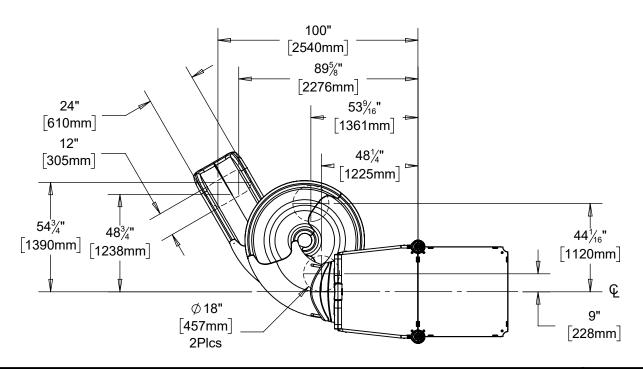


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Top View - Footing Layout 84"



Top View - Footing Layout 96"





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Step 3 (Factory Assembled)

For Infinity Version Only

Attach Infinity Wall Trim to Infinity Wall as shown in Figure 2.

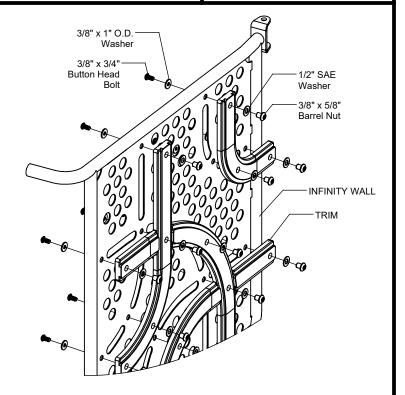


FIGURE 2

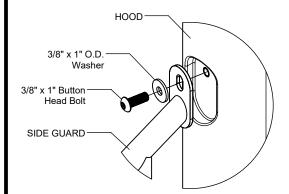


Figure 1.1

Step 4

Attach Side Guard to Hood as shown in Figure 1.1. (See Note A)

Step 5

Attach Deck Mounting Plate to Hood as shown in Figure 1.2. (See Note A)

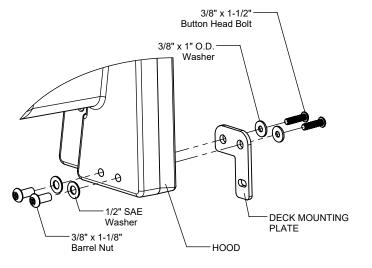


Figure 1.2



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Step 6

Attach Deck to Collar as shown in Figure 1.3. (See Note A)

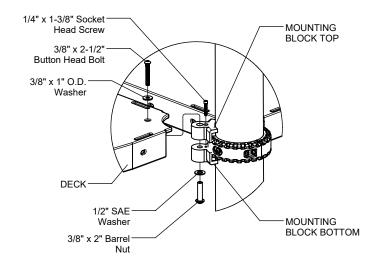


Figure 1.3

Step 7

Attach Spiral Slide Deck to Deck as shown in Figure 3. (See Note A)

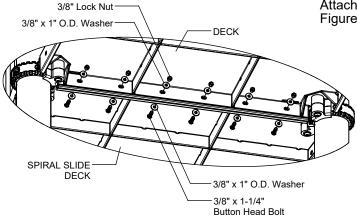


FIGURE 3

Step 8

Attach Wall to Collar as shown in Figure 1.4. (See Note A)

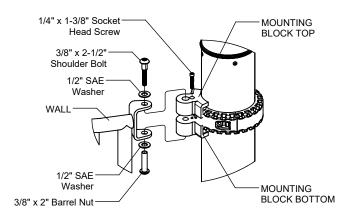


Figure 1.4



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Step 9

Attach Wall to Deck as shown in Figure 1.5. (See Note A)

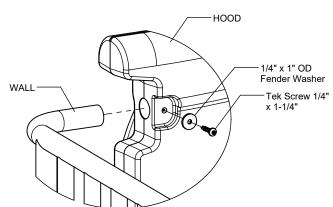


Figure 1.6

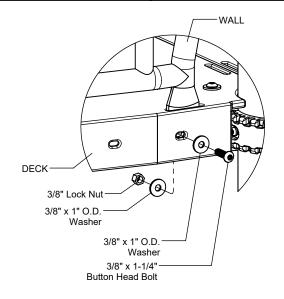


Figure 1.5

Step 10

Attach Wall to Hood as shown in Figure 1.6. (See Note A)

NOTE: Repeat Steps 7-8 for other side before securing with Tek screw.

Step 11

Attach Spacer and Hood to Deck as shown in Figure 4. (See Note A)

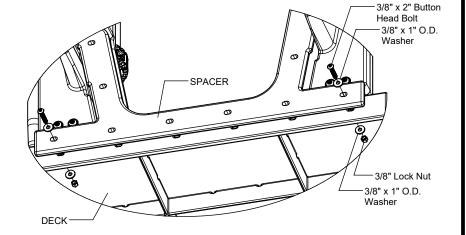


FIGURE 4



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Step 12

Attach Curved Entry to Spiral Slide Deck as shown in Figure 5. (See Note A)

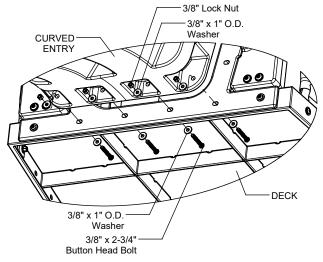
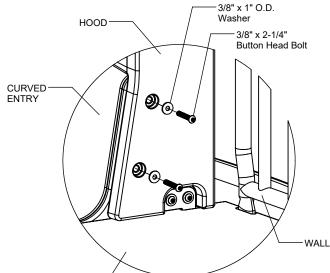


FIGURE 5



Step 13

Secure Curved Entry to Hood as shown in Figure 6. (See Note A)

FIGURE 6

Step 14

DECK

Attach Curved Entry to Spiral Section as shown in Figure 7. (See Note A)

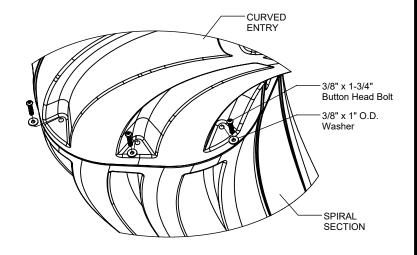


FIGURE 7



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Step 15

Attach Spiral Section to Spiral Section with support with as shown in Figure 8. For connections not using a support, attach Sections as shown in Figure 7. (See Note A)

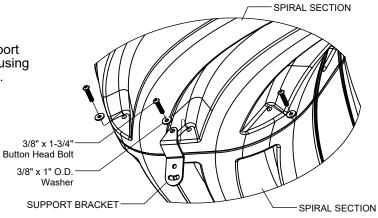
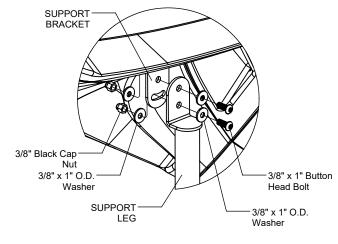


FIGURE 8



Step 16

Place Slide Support in footing hole and attach to Support Bracket as shown in Figure 9. (See Note A)

FIGURE 9

Step 17

Place Slide Leg in footing hole and attach to Exit Section as shown in Figure 1.7. (See Note A)

Step 18

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 19

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

Step 20

Place required protective surfacing under and around Sectional Spiral Slide Assembly. (See Note E)

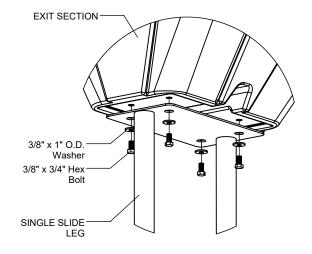


Figure 1.7



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Parts List

R5 SPIRAL SLIDE 72"		
Part #	DESCRIPTION	QTY
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-EXT-S	SLIDE	1
452302	T-Nut 3/8" with Spikes	9
FS-1706-S-ENT-R5-L	Sectional Spiral Slide Wall R5 - Left	1
FS-1706-S-ENT-R5-R	Sectional Spiral Slide Wall R5 - Right	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-50	Twister Slide Support Assembly	1
S-1710-72	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	13
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	63
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

R3.5 SPIRAL SLIDE 72"			
Part #	DESCRIPTION	QTY	
AE-0699	Roto Panel Deck Mounting Plate	2	
CG-1183	Sectional Spiral Slide Deck R35	1	
DE-4339-CRVENT	Twister Slide - Curved Entry	1	
FS-1701	Single Slide Leg	1	
AE-1701-1	Single Slide Leg - Mounting Plate	1	
LE-0080	36" Leg	2	
DE-4339-HOOD	Twister Slide - Hood	1	
DE-4339-SPR	Twister Slide - Spiral	2	
EE-0669	Twister Slide Spacer	1	
FS-1316-CAN	Twister Sit Down Side Guard Canada	2	
DE-4339-EXT	Twister Slide - Exit	1	
DE-4339-EXT-S	SLIDE	1	
452302	T-Nut 3/8" with Spikes	9	
FS-1706-S-ENT-R35-L	Sectional Spiral Slide Wall R35 - Left	1	
FS-1706-S-ENT-R35-R	Sectional Spiral Slide Wall R35 - Right	1	
GG-8110	Mounting Block 4 Top R3.5	4	
GG-8111	Mounting Block 4 Bottom R3.5	4	
S-1710-50	Twister Slide Support Assembly	1	
S-1710-72	Twister Slide Support Assembly	1	
9103052-TR	Bolt Button Head 3/8" x 1"	4	
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10	
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4	
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	13	
9103092-TR	Bolt Button Head 3/8" x 2"	2	
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4	
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2	
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4	
9123032	Bolt Hex 3/8" x 3/4"	4	
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2	
9271062-TR	1/4" x 1-1/4" Tek Screw	2	
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4	
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2	
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	63	
9345002	Washer Flat SAE 1/2"	10	
9413002	Nut Lock 3/8"	16	
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4	
9443092-TR	Nut Barrel 3/8" x 2" BH	4	

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Parts List

R5 SPIRAL SLIDE 84"		
Part #	DESCRIPTION	QTY
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-EXT-S	SLIDE	1
452302	T-Nut 3/8" with Spikes	9
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	1
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
FS-1706-S-ENT-R5-L	Sectional Spiral Slide Wall R5 - Left	1
FS-1706-S-ENT-R5-R	Sectional Spiral Slide Wall R5 - Right	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-62	Twister Slide Support Assembly	1
S-1710-84	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	18
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	68
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

R3.5 SPIRAL SLIDE 84"			
Part #	DESCRIPTION	QTY	
AE-0699	Roto Panel Deck Mounting Plate	2	
CG-1183	Sectional Spiral Slide Deck R35	1	
DE-4339-CRVENT	Twister Slide - Curved Entry	1	
DE-4339-EXT	Twister Slide - Exit	1	
DE-4339-EXT-S	SLIDE	1	
452302	T-Nut 3/8" with Spikes	9	
DE-4339-HOOD	Twister Slide - Hood	1	
DE-4339-SPR	Twister Slide - Spiral	2	
Varies	Twister Slide Section	1	
EE-0669	Twister Slide Spacer	1	
FS-1316-CAN	Twister Sit Down Side Guard Canada	2	
FS-1701	Single Slide Leg	1	
AE-1701-1	Single Slide Leg - Mounting Plate	1	
LE-0080	36" Leg	2	
FS-1706-S-ENT-R35-L	Sectional Spiral Slide Wall R35 - Left	1	
FS-1706-S-ENT-R35-R	Sectional Spiral Slide Wall R35 - Right	1	
GG-8110	Mounting Block 4 Top R3.5	4	
GG-8111	Mounting Block 4 Bottom R3.5	4	
S-1710-62	Twister Slide Support Assembly	1	
S-1710-84	Twister Slide Support Assembly	1	
9103052-TR	Bolt Button Head 3/8" x 1"	4	
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10	
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4	
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	18	
9103092-TR	Bolt Button Head 3/8" x 2"	2	
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4	
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2	
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4	
9123032	Bolt Hex 3/8" x 3/4"	4	
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2	
9271062-TR	1/4" x 1-1/4" Tek Screw	2	
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4	
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2	
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	68	
9345002	Washer Flat SAE 1/2"	10	
9413002	Nut Lock 3/8"	16	
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4	
9443092-TR	Nut Barrel 3/8" x 2" BH	4	

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Parts List

R5 SPIRAL SLIDE 96"		
Part #	DESCRIPTION	QTY
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-EXT-S	SLIDE	1
452302	T-Nut 3/8" with Spikes	9
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
FS-1706-S-ENT-R5-L	Sectional Spiral Slide Wall R5 - Left	1
FS-1706-S-ENT-R5-R	Sectional Spiral Slide Wall R5 - Right	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-74	Twister Slide Support Assembly	1
S-1710-96	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	23
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	73
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

R3.5 SPIRAL SLIDE 96"			
Part #	DESCRIPTION	QTY	
AE-0699	Roto Panel Deck Mounting Plate	2	
CG-1183	Sectional Spiral Slide Deck R35	1	
DE-4339-CRVENT	Twister Slide - Curved Entry	1	
DE-4339-EXT	Twister Slide - Exit	1	
DE-4339-EXT-S	SLIDE	1	
452302	T-Nut 3/8" with Spikes	9	
DE-4339-HOOD	Twister Slide - Hood	1	
DE-4339-SPR	Twister Slide - Spiral	2	
Varies	Twister Slide Section	2	
EE-0669	Twister Slide Spacer	1	
FS-1316-CAN	Twister Sit Down Side Guard Canada	2	
FS-1701	Single Slide Leg	1	
AE-1701-1	Single Slide Leg - Mounting Plate	1	
LE-0080	36" Leg	2	
FS-1706-S-ENT-R35-L	Sectional Spiral Slide Wall R35 - Left	1	
FS-1706-S-ENT-R35-R	Sectional Spiral Slide Wall R35 - Right	1	
GG-8110	Mounting Block 4 Top R3.5	4	
GG-8111	Mounting Block 4 Bottom R3.5	4	
S-1710-74	Twister Slide Support Assembly	1	
S-1710-96	Twister Slide Support Assembly	1	
9103052-TR	Bolt Button Head 3/8" x 1"	4	
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10	
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4	
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	23	
9103092-TR	Bolt Button Head 3/8" x 2"	2	
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4	
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2	
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4	
9123032	Bolt Hex 3/8" x 3/4"	4	
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2	
9271062-TR	1/4" x 1-1/4" Tek Screw	2	
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4	
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2	
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	73	
9345002	Washer Flat SAE 1/2"	10	
9413002	Nut Lock 3/8"	16	
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4	
9443092-TR	Nut Barrel 3/8" x 2" BH	4	

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Parts List

R5 INFINITY SPIRAL SLIDE 72"			
Part #	DESCRIPTION	QTY	
AE-0699	Roto Panel Deck Mounting Plate	2	
CF-1184	Sectional Spiral Slide Deck R5	1	
DE-4339-CRVENT	Twister Slide - Curved Entry	1	
FS-1701	Single Slide Leg	1	
AE-1701-1	Single Slide Leg - Mounting Plate	1	
LE-0080	36" Leg	2	
DE-4339-HOOD	Twister Slide - Hood	1	
DE-4339-SPR	Twister Slide - Spiral	2	
EE-0669	Twister Slide Spacer	1	
FS-1316-CAN	Twister Sit Down Side Guard Canada	2	
DE-4339-EXT	Twister Slide - Exit	1	
GF-7006-B	Mounting Block R5 Bottom	4	
GF-7006-T	Mounting Block R5 Top	4	
S-1710-50	Twister Slide Support Assembly	1	
S-1710-72	Twister Slide Support Assembly	1	
9103052-TR	Bolt Button Head 3/8" x 1"	4	
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10	
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4	
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	13	
9103092-TR	Bolt Button Head 3/8" x 2"	2	
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4	
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2	
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4	
9123032	Bolt Hex 3/8" x 3/4"	4	
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2	
9271062-TR	1/4" x 1-1/4" Tek Screw	2	
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4	
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2	
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	63	
9345002	Washer Flat SAE 1/2"	10	
9413002	Nut Lock 3/8"	16	
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4	
9443092-TR	Nut Barrel 3/8" x 2" BH	4	

R3.5 INFINITY SPIRAL SLIDE 72"		
Part #	DESCRIPTION	QTY
AE-0699	Roto Panel Deck Mounting Plate	2
CG-1183	Sectional Spiral Slide Deck R35	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
FS-1701	Single Slide Leg	1
AE-1701-1	Single Slide Leg - Mounting Plate	1
LE-0080	36" Leg	2
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
DE-4339-EXT	Twister Slide - Exit	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
S-1710-50	Twister Slide Support Assembly	1
S-1710-72	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	13
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	63
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4



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Parts List

R5 INFINITY SPIRAL SLIDE 84"		
Part #	DESCRIPTION	QTY
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	1
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-62	Twister Slide Support Assembly	1
S-1710-84	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	18
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	68
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

R3.5 INFINITY SPIRAL SLIDE 84"		
Part #	DESCRIPTION	QTY
AE-0699	Roto Panel Deck Mounting Plate	2
CG-1183	Sectional Spiral Slide Deck R35	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	1
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
S-1710-62	Twister Slide Support Assembly	1
S-1710-84	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	18
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	68
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

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Parts List

R5 INFINITY SPIRAL SLIDE 96"		
Part #	DESCRIPTION	QTY
AE-0699	Roto Panel Deck Mounting Plate	2
CF-1184	Sectional Spiral Slide Deck R5	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
S-1710-74	Twister Slide Support Assembly	1
S-1710-96	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	23
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	73
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

R3.5 INFINITY SPIRAL SLIDE 96"		
Part #	DESCRIPTION	QTY
AE-0699	Roto Panel Deck Mounting Plate	2
CG-1183	Sectional Spiral Slide Deck R35	1
DE-4339-CRVENT	Twister Slide - Curved Entry	1
DE-4339-EXT	Twister Slide - Exit	1
DE-4339-HOOD	Twister Slide - Hood	1
DE-4339-SPR	Twister Slide - Spiral	2
Varies	Twister Slide Section	2
EE-0669	Twister Slide Spacer	1
FS-1316-CAN	Twister Sit Down Side Guard Canada	2
FS-1701	Single Slide Leg	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
S-1710-74	Twister Slide Support Assembly	1
S-1710-96	Twister Slide Support Assembly	1
9103052-TR	Bolt Button Head 3/8" x 1"	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	10
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	4
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	23
9103092-TR	Bolt Button Head 3/8" x 2"	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9123032	Bolt Hex 3/8" x 3/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9271062-TR	1/4" x 1-1/4" Tek Screw	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	4
9321052-THK	Washer Fender 1/4" x 1" OD x .125" thk	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	73
9345002	Washer Flat SAE 1/2"	10
9413002	Nut Lock 3/8"	16
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4



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Specifications

SPIRAL SLIDE DECK:

Shall be precision cut, formed, and welded using 12 gauge thick steel and shall be Play-Tuff™ coated after fabrication.

TWISTER SLIDE SECTIONS & HOOD:

Shall be constructed of UV-stabilized, rotationally molded, linear, low density polyethylene with an average wall thickness of .250".

TWISTER SLIDE SPACER & INFINITY WALL TRIM:

Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

SINGLE SLIDE LEG:

Shall be fabricated using \emptyset 1.660" 11 gauge steel tubing with 10 gauge HR steel and \emptyset 5/8" round bar and will have a multi-stage baked-on powder coat

SECTIONAL SPIRAL SLIDE WALL:

Shall be fabricated using \emptyset 1.315" 12 gauge steel tubing and \emptyset 1.029" 14 gauge steel tubing with 1/4" HR steel clevis and will have a multi-stage baked-on powder coat finish.

INFINITY WALL SECTIONAL SPIRAL SLIDE WALL:

Shall be fabricated using \emptyset 1.315" 12 gauge steel tubing, 12ga HR sheet steel and 1/4" HR steel clevis and will have a multi-stage baked-on powder coat finish.

TWISTER SIT DOWN SIDE GUARD CANADA:

Shall be fabricated using \emptyset 1.029" 14 gauge steel tubing with 10 gauge HR steel and will have a multistage baked-on powder coat finish.

SECTIONAL SLIDE SUPPORT:

Shall be fabricated using ϕ 1.660" 11 gauge steel tubing with 3/16" HR steel ϕ 5/8" round bar and will have a multi-stage baked-on powder coat finish.

SECTIONAL SLIDE SUPPORT BRACKET: Shall be fabricated using 3/16" HR steel and will have a multi-stage baked-on powder coat finish.

ROTO PANEL DECK MOUNTING PLATE:

Shall be fabricated using 1/4" HR steel and will have a multi-stage baked-on powder coat finish.

MOUNTING BLOCKS:

Shall be two-part and precision die-cast from a high strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Assembled Parts List

R5 INFINITY SPIRAL SLIDE		
Part #	DESCRIPTION	QTY
EF-0606-L1	Infinity Wall Sectional Spiral Slide Wall R5 Trim 1 - Left	1
EF-0606-L2	Infinity Wall Sectional Spiral Slide Wall R5 Trim 2 - Left	1
EF-0606-L3	Infinity Wall Sectional Spiral Slide Wall R5 Trim 3 - Left	1
EF-0606-L4	Infinity Wall Sectional Spiral Slide Wall R5 Trim 4 - Left	1
EF-0606-R1	Infinity Wall Sectional Spiral Slide Wall R5 Trim 1 - Right	1
EF-0606-R2	Infinity Wall Sectional Spiral Slide Wall R5 Trim 2 - Left	1
EF-0606-R3	Infinity Wall Sectional Spiral Slide Wall R5 Trim 3 - Right	1
EF-0606-R4	Infinity Wall Sectional Spiral Slide Wall R5 Trim 4 - Right	1
FS-1706-S-IW-R5-L	Infinity Wall Sectional Spiral Slide Wall R5 - Left	1
FS-1706-S-IW-R5-R	Infinity Wall Sectional Spiral Slide Wall R5 - Right	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	28
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	28
9345002	Washer Flat SAE 1/2"	28
9443022-TR	Nut Barrel 3/8" x 5/8" BH	28

R3.5 INFINITY SPIRAL SLIDE		
Part #	DESCRIPTION	QTY
EG-0078-L1	Infinity Wall Sectional Spiral Slide Wall R35 Trim 1 - Left	1
EG-0078-L2	Infinity Wall Sectional Spiral Slide Wall R35 Trim 2 - Left	1
EG-0078-L3	Infinity Wall Sectional Spiral Slide Wall R35 Trim 3 - Left	1
EG-0078-L4	Infinity Wall Sectional Spiral Slide Wall R35 Trim 4 - Left	1
EG-0078-R1	Infinity Wall Sectional Spiral Slide Wall R35 Trim 1 - Right	1
EG-0078-R2	Infinity Wall Sectional Spiral Slide Wall R35 Trim 2 - Right	1
EG-0078-R3	Infinity Wall Sectional Spiral Slide Wall R35 Trim 3 - Right	1
EG-0078-R4	Infinity Wall Sectional Spiral Slide Wall R35 Trim 4 - Right	1
FS-1706-S-ENT-IW- R35-L	Infinity Wall Sectional Spiral Slide Wall R35 - Left	1
FS-1706-S-ENT-IW- R35-R	Infinity Wall Sectional Spiral Slide Wall R35 - Right	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	28
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	28
9345002	Washer Flat SAE 1/2"	28
9443022-TR	Nut Barrel 3/8" x 5/8" BH	28

Maintenance

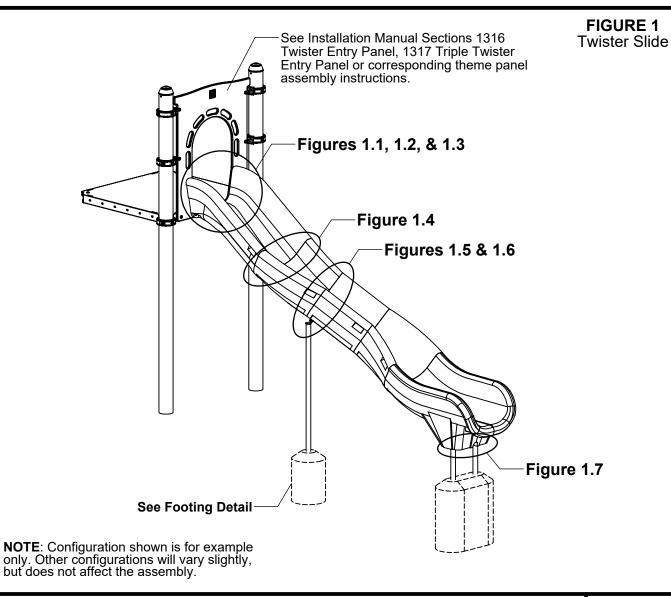
Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



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IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- **(C)** Refer to Installation Manual for 1316 Twister Entry Panel, 1317 Triple Twister Entry Panel assembly instructions or corresponding theme panel assembly instructions.
- **(D)** Use appropriate compliant protective surfacing and adjust footing depths accordingly. See free publication The Handbook for Public Playground Safety, Publication #325 at www.CPSC.gov for the surfacing appropriate for the fall height of the equipment or consult you surfacing supply representative.
- **(E)** Exit height must be between 7" [180mm] and 15" [380mm] from finish grade for slides with an elevation greater than 48". For slide elevations no greater than 48", the exit height shall be no greater than 11". Exit region must also have a downward slope of 0 to 4°.





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Step 1

Elevation View - Footing Detail

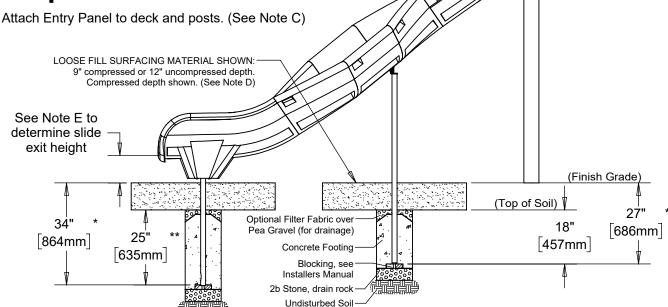
Refer to structure Top View and Step 5 to determine footing locations. Dig (1) Ø12" footing hole for each Slide Support and (1) 12"x24" oblong footing hole for each Exit Leg. Refer to Footing Detail for depth and details.

IMPORTANT: For areas with soft soil conditions, larger footings may be required.

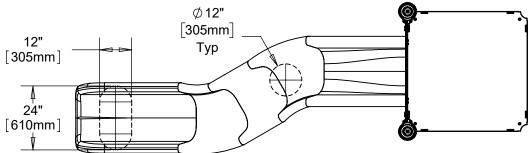
* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

**Adjust footing depth with blocking to meet required exit height. (See Note E)

Step 2



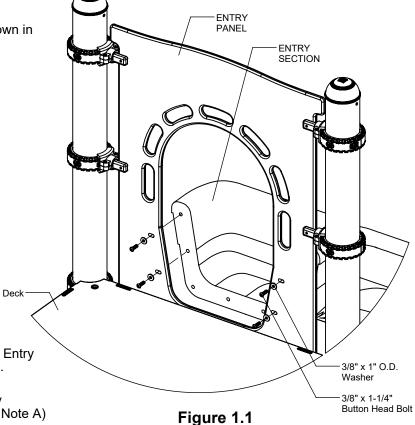
Top View - Footing Layout



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Attach Entry Section(s) to Entry Panel as shown in Figure 1.1. (See Note A)



Step 4

For Entry Sections including all Triple Twister Entry Panels use the hardware shown in Figure 1.2. (See Note A)

For Single Canada Entry Panels, attach Entry Section to deck as shown in Figure 1.3. (See Note A)

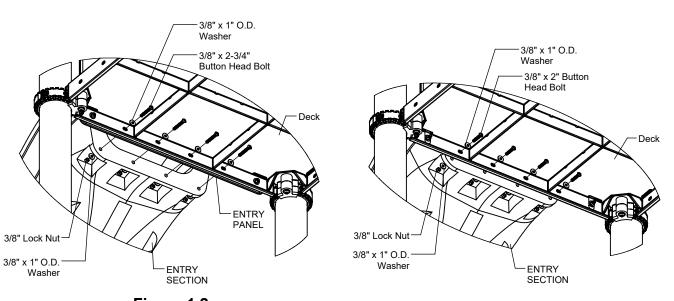


Figure 1.3

Step 5

Attach sections together as shown in Figure 1.4. Refer to structure Top View for configuration and support location. For section joints where Support Bracket is attached, see Figure 1.5. (See Note A)

Determine footing center location by dropping plumb bob from Support Bracket(s).

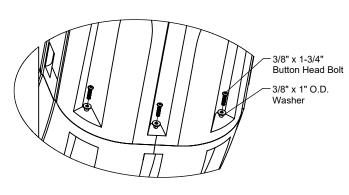
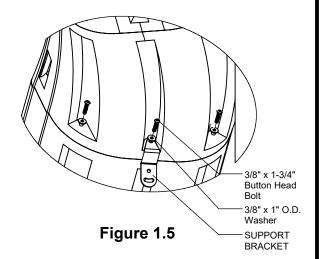


Figure 1.4



Step 6

Place Slide Support in footing hole and attach to Support Bracket as shown in Figure 1.6. (See Note A)

Step 7

Place Slide Leg in footing hole and attach to Exit Section as shown in Figure 1.7. (See Note A)

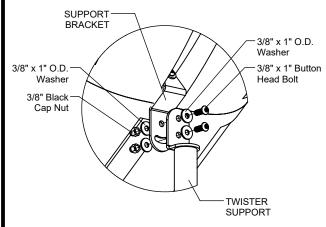


Figure 1.6

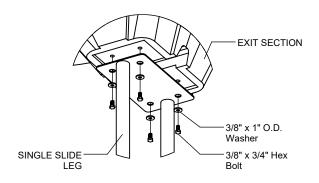


Figure 1.7

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Step 8

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 9

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Notes B and E)

Step 10

Place appropriate compliant protective surfacing under and around Twister Slide. (See Note D)

Specifications

TWISTER SLIDE SECTIONS:

Shall be constructed of UV-stabilized rotationally molded linear low density polyethylene with an average wall thickness of .250".

TWISTER SLIDE SUPPORT:

Shall be fabricated of 1.660" O.D. 11 gauge steel tubing welded to a 3/16" formed and punched steel plate and will have a multi-stage baked-on powder coat finish.

SINGLE SLIDE LEG:

Shall be fabricated of 1.660" O.D. 11 gauge steel tubing welded to a 10 gauge steel plate and will have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Parts List

TWISTER SLIDE ROTO		
Part #	DESCRIPTION	QTY
DE-4339-ENT	Twister Slide - Entry	Varies
DE-4339-EXT	Twister Slide-Exit	Varies
DE-4339-L	Twister Slide-Left	Varies
DE-4339-R	Twister Slide-Right	Varies
DE-4339-S	Twister Slide-Straight	Varies

EACH ENTRY HARDWARE ASTM		
Part #	DESCRIPTION	QTY
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103122-TR	Bolt Button Head 3/8" x 2-3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9413002	Nut Lock 3/8"	4

EACH ENTRY HARDWARE CSA		
Part #	DESCRIPTION	QTY
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9103092-TR	Bolt Button Head 3/8" x 2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9413002	Nut Lock 3/8"	4

	EACH SECTION JOINT	
Part #	DESCRIPTION	QTY
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	5
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5

EACH MID-SUPPORT		
Part #	DESCRIPTION	QTY
BE-4500	Sectional Slide Support Bracket #2	1
FS-1710-S	Sectional Slide Support	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9413162-BLK	Nut Lock 3/8" w/ Black Cap	2

EACH EXIT LEG		
Part #	DESCRIPTION	QTY
FS-1701	Single Slide Leg	1
9123032	Bolt Hex 3/8" x 3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



TWISTER SLIDE SUPPORT ASSEMBLY INSTALLATION INSTRUCTIONS

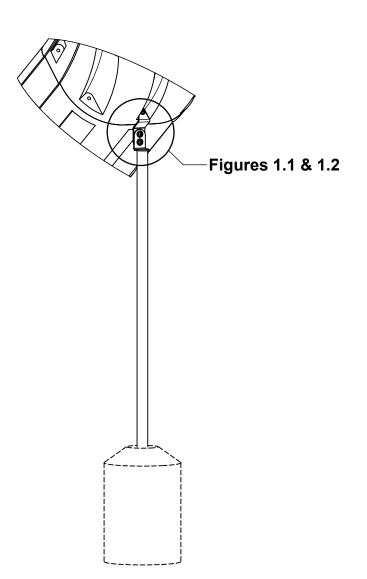
1710-SUP Page 1 of 3

IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

FIGURE 1

Twister Slide Support Assembly



TWISTER SLIDE SUPPORT ASSEMBLY INSTALLATION INSTRUCTIONS

1710-SUP Page 2 of 3

Step 1

Attach Support Bracket to Twister Support as shown in Figure 1.1. (See Note A)

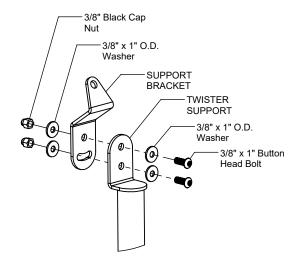


Figure 1.1

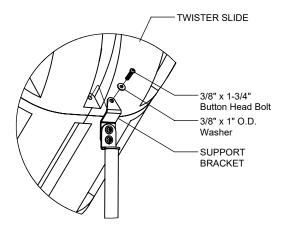


Figure 1.2

Step 2

Attach Twister Support to Twister Slide as shown in Figure 1.2. (See Note A)

Step 3

For Surface Mount Only

Attach Twister Support Top to Twister Support Bottom as shown in Figure 2. (See Note A)

NOTE: Do not secure with tek screws until correct support height is achieved with the Support Top conected to the slide and the Support Bottom secured to the concrete.

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

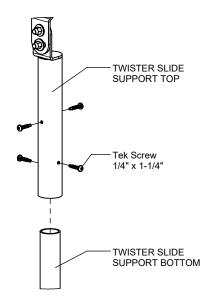


FIGURE 2



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TWISTER SLIDE SUPPORT ASSEMBLY INSTALLATION INSTRUCTIONS

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Parts List

S-1710-SUP		
Part #	DESCRIPTION	QTY
BE-4500	Sectional Slide Support Bracket #2	1
FS-1710-S	Twister Slide Support	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5
9413162-BLK	Nut Lock 3/8" w/ Black Cap	2

S-1710-SUP-SM		
Part #	DESCRIPTION	QTY
BE-4500	Sectional Slide Support Bracket #2	1
FS-1710-S-SM-B	Twister Slide Support - Surface Mount - Bottom	1
FS-1710-S-SM-T	Twister Slide Support - Surface Mount - Top	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	1
9271062-TR	1/4" x 1-1/4" Tek Screw	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	5
9413162-BLK	Nut Lock 3/8" w/ Black Cap	2

Specifications

SECTIONAL SLIDE SUPPORT BRACKET #2: Shall be fabricated using 3/16"HR sheet steel and will have a multi-stage baked-on powder coat finish.

TWISTER SLIDE SUPPORT:

Shall be fabricated using Ø1.660 steel tubing, 3/16" HR sheet steel and 5/8"round bar and will have a multi-stage baked-on powder coat finish.

TWISTER SLIDE SUPPORT TOP:

Shall be fabricated using Ø2.000 steel tubing and 3/16" HR sheet steel and will have a multi-stage baked-on powder coat finish.

TWISTER SLIDE SUPPORT BOTTOM:

Shall be fabricated using Ø1.660 steel tubing and 1/4" HR sheet steel and will have a multi-stage baked-on powder coat finish.

HARDWARE:

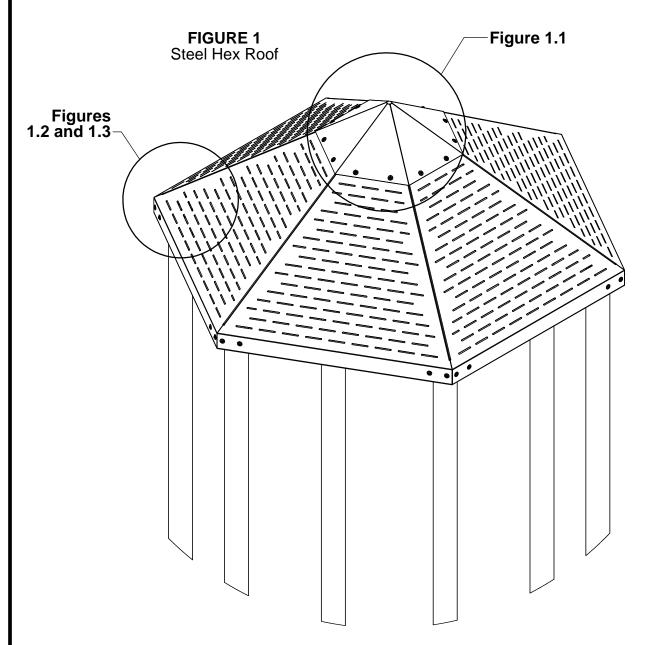
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.



NOTE: R5 Configuration shown. R3.5 will vary slightly, but does not affect the assembly.

STEEL HEX ROOF

1803-STL Page 2 of 3

Step 1

Attach Roof Sides as shown in Figure 2. (See Note A)

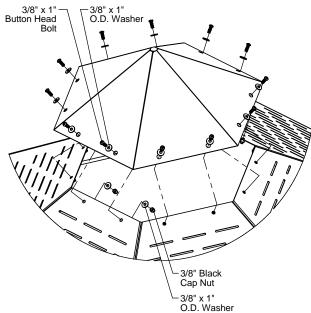
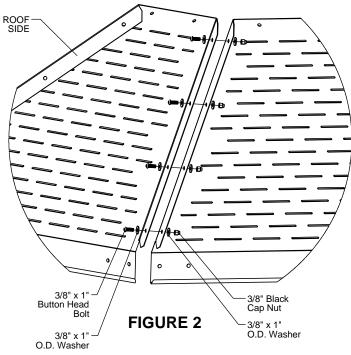


Figure 1.1

Step 3

Attach Corner Roof Brackets to Roof Sides as shown in Figure 1.2. (See Note A)



Step 2

Attach Roof Cap to Roof Sides as shown in Figure 1.1. (See Note A)

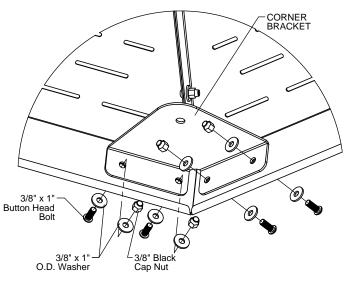


Figure 1.2



Step 4

Attach Hex Roof to posts as shown in Figure 1.3. (See Note A)

Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

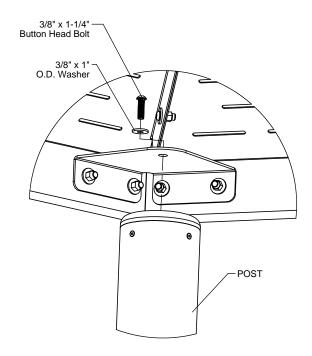


Figure 1.3

R5 Parts List

Part #	DESCRIPTION	QTY.
BE-0186	Steel Hex Roof Corner Bracket	6
BF-0185	Steel Hex Roof Side R5	6
CE-0184	Steel Hex Roof Cap	1
9103052-TR	Bolt Button Head 3/8" x 1"	60
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	126
9413162-BLK	Nut Lock 3/8" w/ Black Cap	60

R3.5 Parts List

Part #	DESCRIPTION	QTY.
BE-0186	Steel Hex Roof Corner Bracket	6
BG-0187	Steel Hex Roof Side R3.5	6
CE-0184	Steel Hex Roof Cap	1
9103052-TR	Bolt Button Head 3/8" x 1"	60
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	6
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	126
9413162-BLK	Nut Lock 3/8" w/ Black Cap	60

Specifications

STEEL HEX ROOF CORNER BRACKET:

Shall be formed from 10 gauge sheet steel. The Steel Hex Roof Corner Bracket shall have a multistage baked-on power coat finish.

STEEL HEX ROOF SECTION & CAP:

Shall be formed from 14 gauge sheet steel. The Steel Hex Roof Section shall have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

HAND SPIN CYCLER INSTALLATION INSTRUCTIONS

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IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps assembly instructions.

FIGURE 1 Hand Spin Cycler R5 See Installation Manual Sections 09 Collars and 11 Clamps

NOTE: R5 Hand Spin Cycler shown. Other configurations will vary slightly, but does not affect assembly.

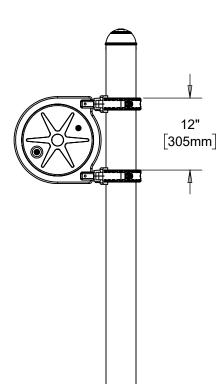


HAND SPIN CYCLER INSTALLATION INSTRUCTIONS

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Step 1 (Factory Assembled)

Assemble Spin Cycler components as shown in Figure 1. (See Note A)



SIDE ELEVATION

Step 3

Attach Mounting Lugs to collars as shown in Figure 2. (See Notes A and B)

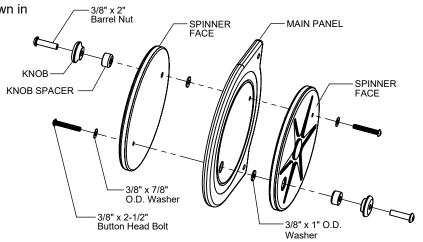


FIGURE 1

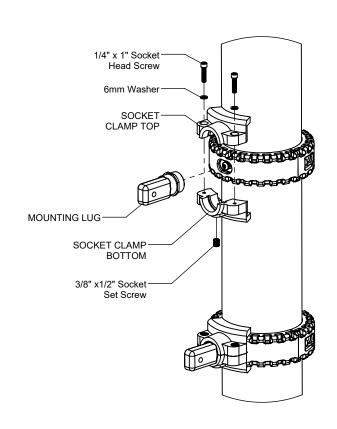


FIGURE 2



HAND SPIN CYCLER INSTALLATION INSTRUCTIONS

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Step 4

Attach Main Panel to mounting lugs as shown in Figure 3. (See Note A)

Step 5

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

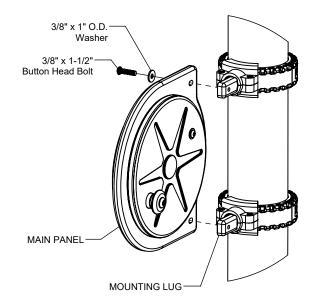


FIGURE 3

Parts List

R5 Hand Spin Cycler		
Part #	DESCRIPTION	QTY
GF-7007	Mounting Lug R5	2
HS-1001-R5	Socket Clamp Set R5	2
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	2

R35 Hand Spin Cycler		
Part #	DESCRIPTION	QTY.
GG-8113	Mounting Lug R3.5	2
HS-1001-R35	Socket Clamp Set R3.5	2
9103072-TR	Bolt Button Head 3/8" x 1-1/2"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	2

Assembled Parts List

Part #	DESCRIPTION	QTY
EE-0102-CS	Hand Spin Cycler - Center Spacer	1
EE-0102-K	Hand Spin Cycler - Knob	2
EE-0102-KS	Hand Spin Cycler - Knob Spacer	2
EE-0102-MP	Hand Spin Cycler - Main Panel	1
EE-0102-SF	Hand Spin Cycler - Spinner Face	2
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	2
9333042	Washer Flat 3/8" x 7/8" O.D.	2
9443092-TR	Nut Barrel 3/8" x 2" BH	2

HAND SPIN CYCLER MAIN PANEL, SPINNER FACE, CENTER SPACER, KNOB SPACER AND KNOB:

Shall be made from high density 3/4" thick hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color

MOUNTING LUGS:

Shall be precision die-cast from a high-strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



CRUNCH HANDLE ASSEMBLY INSTALLATION INSTRUCTIONS

1937 Page 1 of 3

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars and R5-11 Socket Clamps installation instructions.
- **(C)** The maximum height of rungs (at grasping point) from the top of the protective surfacing varies by age group: Ages 2-5: 60" [1524mm] above protective surfacing. Ages 5-12: 84" [2130mm] above protective surfacing.
- **(D)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1 Crunch Handle Assembly

See Installation Manual Sections 09 Collars and 11 Clamps

FIGURE 2 Attachment varies based on system type

NOTE: R5 Crunch Handle shown. Other configurations will vary slightly.

CRUNCH HANDLE ASSEMBLY INSTALLATION INSTRUCTIONS

1937 Page 2 of 3

Step 1

For R5 and R3.5 Versions, locate and attach Collars at height designated on the Assembly View. (See Notes B & C)

Step 2

Attach Crunch Handle to Post as shown in Figure 2. (See Notes A & B)

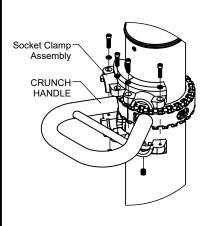
Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 4

Place required protective surfacing under and around Crunch Handle. (See Note D)

R5 Assembly



R3.5 Assembly

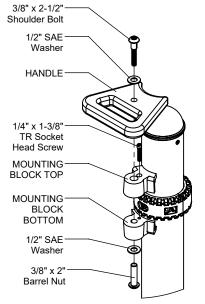
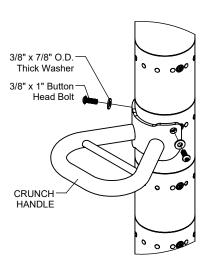


FIGURE 2

Revolution Assembly



CRUNCH HANDLE ASSEMBLY INSTALLATION INSTRUCTIONS

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Parts Lists

R5 CRUNCH HANDLE		
Part #	DESCRIPTION	QTY
FS-1937-R5	Crunch Handle R5	1
HS-1001-R5	Socket Clamp Set R5	2

R3.5 CRUNCH HANDLE		
Part #	DESCRIPTION	QTY
EG-8328	Crunch Handle R3.5	1
GG-8110	Mounting Block 4 Top R3.5	1
GG-8111	Mounting Block 4 Bottom R3.5	1
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	1
9281062-5-TR	Screw Soc HD CS 1/4" x 1-3/8" TR	1
9345002	Washer Flat SAE 1/2"	2
9443092-TR	Nut Barrel 3/8" x 2" BH	1

REVOLUTION CRUNCH HANDLE		
Part #	DESCRIPTION	QTY
FS-1937-RV	Crunch Handle RV	1
9103052-TR	Bolt Button Head 3/8" x 1"	2
9339042	Washer Flat 3/8" x 7/8" O.D. x .100" Thick	2

Specifications

CRUNCH HANDLE R5:

Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with a welded 0.625" H.R. round bar crossbar. The Crunch Handle R5 shall have a multi-stage baked-on powder coat finish.

CRUNCH HANDLE R35:

Shall be made from high density 1" sheet plastic specially formulated for optimum UV stability and color retention.

CRUNCH HANDLE RV:

Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with a welded 0.625" H.R. round bar crossbar and 1/4" thick stainless steel mounting bracket. The Crunch Handle RV shall have a multi-stage baked-on powder coat finish.

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Socket Clamps have a multi-stage baked-on powder coat finish.

MOUNTING BLOCKS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



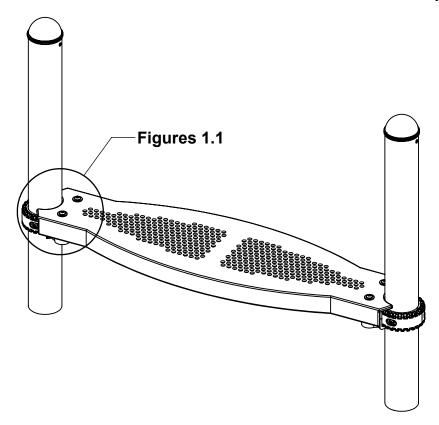
PLAY SEAT ASSEMBLY INSTALLATION INSTRUCTIONS

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IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars, 11 Socket Clamps installation instructions.
- **(C)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1 Play Seat Assembly



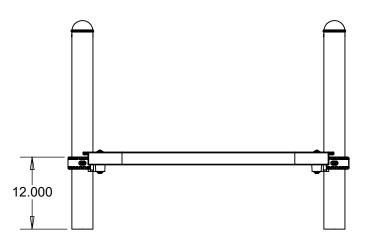
NOTE: R35 Play Seat shown. Other configurations will vary slightly, but does not affect assembly.



Step 1

Locate and attach collars at heights shown in Elevation View. Height shown from finish grade to top of collar (See Note B)

Elevation View



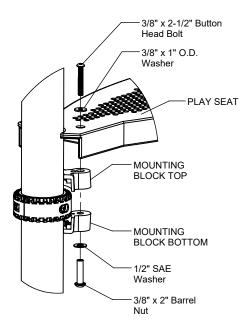


Figure 1.1

Step 2

Attach seat to collars as shown in Figure 1.1 (See Note A)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 4

Place required protective surfacing under and around Assembly Name. (See Note D)



PLAY SEAT ASSEMBLY INSTALLATION INSTRUCTIONS

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Parts List

PLAY SEAT R35		
Part #	DESCRIPTION	QTY
CG-8143	Play Seat R35	1
GG-8110	Mounting Block 4 Top R3.5	4
GG-8111	Mounting Block 4 Bottom R3.5	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

PLAY SEAT R5		
Part #	DESCRIPTION	QTY
CF-7077	Play Seat R5	1
GF-7006-B	Mounting Block R5 Bottom	4
GF-7006-T	Mounting Block R5 Top	4
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9345002	Washer Flat SAE 1/2"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	4

Specifications

PLAY SEAT:

Shall be fabricated using punched, formed and welded 12 gauge sheet steel. The Bench Top shall be Play-Tuff™ coated after fabrication.

MOUNTING BLOCKS:

Shall be two-part and precision die-cast from a high strength aluminum alloy. The Mounting Blocks have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



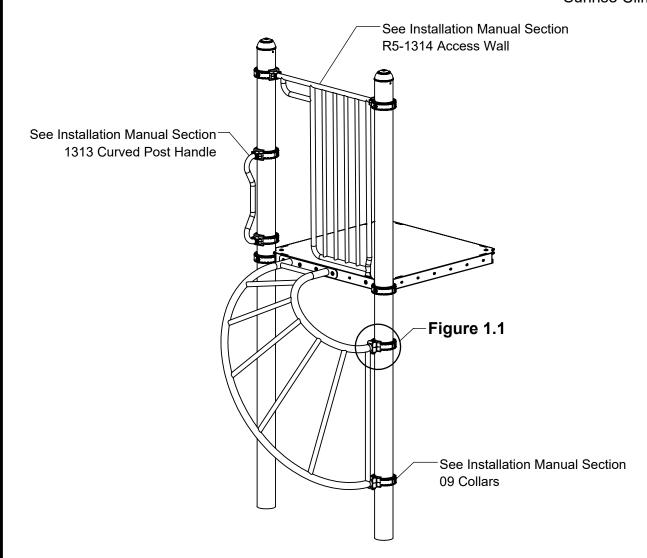
SUNRISE CLIMBER R5 INSTALLATION INSTRUCTIONS

R5-12801 Page 1 of 3

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- **(B)** Refer to Installation Manual for 09 Collars, 1313 Curved Post Handle, and R5-1314 Access Wall installation instructions.
- **(C)** An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication The Handbook for Public Playground Safety, Publication #325 at www.cpsc.gov for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1Sunrise Climber



NOTE: R5 5' deck height Sunrise Climber right side shown. Other configurations will vary slightly, but does not affect assembly.



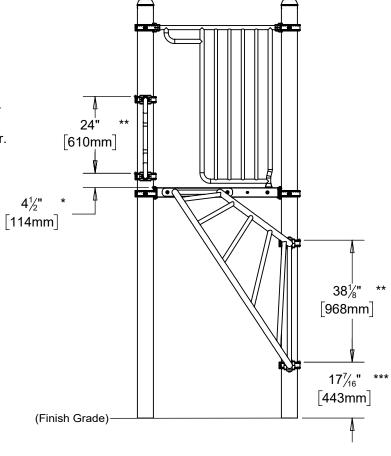
SUNRISE CLIMBER R5 INSTALLATION INSTRUCTIONS

R5-12801 Page 2 of 3

Step 1

Locate and attach collars at heights shown in Elevation View. (See Note B)

- * Height from top of deck to top of collar.
- ** Height shown from top of collar to top of collar.
- *** Height shown from finish grade to top of collar.



Elevation View

SUNRISE CLIMBER 3/8" Lock Nut 3/8" x 1" O.D. Washer 3/8" x 1-1/4" Button Head Bolt

FIGURE 2

Step 2

Attach Sunrise Climber to deck as shown in Figure 2. (See Note A).

Step 3

Attach Sunrise Climber to collars as shown in Figure 1.1. (See Note A).

Step 4

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

Step 5

Place required protective surfacing under and around Sunrise Climber. (See Note C)

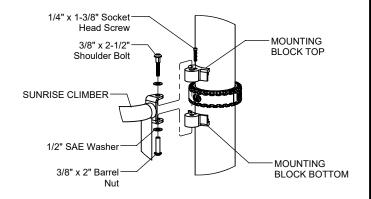


Figure 1.1



SUNRISE CLIMBER R5 INSTALLATION INSTRUCTIONS

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Parts List

Part #	DESCRIPTION	QTY
FS-12801-R5	Sunrise Climber R5	1
GF-7006-B	Mounting Block R5 Bottom	2
GF-7006-T	Mounting Block R5 Top	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	4
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	2
9281062-5-TR	Screw Soc HD 1/4" x 1-3/8"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	8
9345002	Washer Flat SAE 1/2"	4
9413002	Nut Lock 3/8"	4
9443092-TR	Nut Barrel 3/8" x 2" BH	2

Specifications

SUNRISE CLIMBER R5:

Shall be fabricated using 1.315" O.D. 12 guage steel rungswith welded 1.900" O.D. 11 guage steel frame, 1/4" thick steel mounting plate and clevises and will have a multi-stage baked-on powder coat finish.

MOUNTING BLOCKS:

Shall be two-part and precision die-cast from a high strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

SOCKET CLAMPS:

Shall be two-part and precision die-cast from a high strength aluminum alloy and will have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance



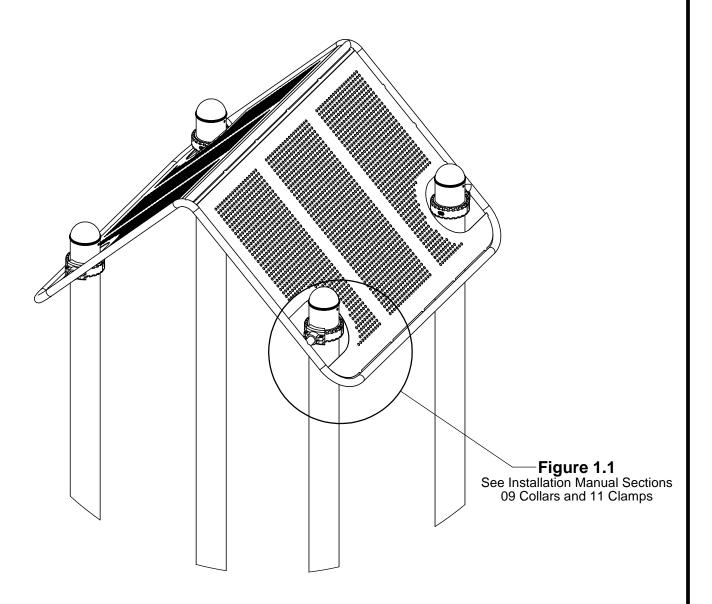
STEEL GABLE SHADE ROOF INSTALLATION INSTRUCTIONS

18016 Page 1 of 2

IMPORTANT NOTES: Read First

- **(A)** Use liquid thread lock (such as Loctite[®]) with all threaded hardware. <u>Important:</u> Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Refer to Installation Manual for 09 Collars and 11 Socket Clamps installation instructions.

FIGURE 1 Steel Gable Shade Roof



NOTE: R5 Steel Gable Shade Roof shown. Other configurations will vary slightly, but does not affect assembly.



STEEL GABLE SHADE ROOF INSTALLATION INSTRUCTIONS

18016 Page 2 of 2

Step 1

Locate and attach collars at height shown in Elevation View. (See Note B)

Step 2

Attach Shade Roof to collars as shown in Figure 1.1. (See Notes A & B)

Step 3

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

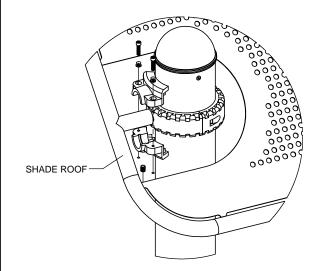
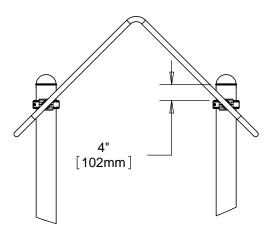


Figure 1.1



Elevation View

R5 Parts List

Part #	DESCRIPTION	QTY.
FS-18016-R5	Steel Gable Shade Roof R5	1
HS-1001-R5	Socket Clamp Set R5	4

R3.5 Parts List

Part #	DESCRIPTION	QTY.
FS-18016-R35	Steel Gable Shade Roof R3.5	1
HS-1001-R35	Socket Clamp Set R3.5	4

Specifications

STEEL GABLE SHADE ROOF:

Shall be 14 gauge sheet steel welded to 1.315" O.D. 12 gauge steel frame. Steel Gable Shade Roof shall have a multi-stage baked-on powder coat finish.

HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



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