Henderson
recreation equipment limited

PLAYTOT ON-GROUND
INSTALLATION INSTRUCTIONS

11 Gilbertson Drive P.O. Box 68 Simcoe, Ontario, Canada N3Y 4K8 1-800-265-5462 Fax (519) 426-1132

Please take the time to review this very IMPORTANT information concerning the installation of your new Henderson Recreation Equipment Play Structure. To assist you with the installation of your new play structure, we have listed a few important details for you to consider that will help to ensure there are no unnecessary delays and additional costs for the installation of your equipment. If you have any questions or require additional information, please contact your sales representative or the installation coordinator.

Information Included in this Package

Component Installation Instructions
On-ground Method Installation Instructions
Layout Drawings / 3d Drawings
Packing Slip / Customer Count-sheet

Tools Provided for Installation

Tamper Resistant Key Torx #45

Tools Required for Site Layout

Line Level (50' minimum)
Plumb Bob
Stakes (for Locating)
Spray Paint

Tools Required for Installation

Allen Socket, 7/32”
Allen Socket, 3/8”
Tamper Resistant Socket T-45T
Bolt Cutters
Claw Hammer
Drill, 1/2” Heavy Duty and Variable Speed
Drill Bit Set
Levels, 24”, 48”
Pliers
Pry Bar
Ratchets, 3/8”, ½” c/w Extension
Round File
Rubber Mallet
Screwdriver Set
Sockets, Deep ½” to ¾”, 10mm
Square, Small Corner Square
Tape Measures, 20', 25', 100'
Tin Snips
Utility Knife
Vice Grips
Wire Cutters
Wrenches, 3/8” to ¾”, 10mm
Chainsaw (for Wood Border)
Clean-up Supplies, Bucket and Clean Rags
Extension Cord, 50’
Generator, 4000 Watt (or Eq. Power Source)
Jack All Jack
Rakes
Shovels
Sledge Hammer
Water / Water Source
Wheelbarrow

Utility Locates

If installation of your equipment will require digging or excavation, it is important that the underground locations of utilities such as electric, gas, telephone, cable, water or any other private or underground obstructions are known prior to excavation work commencing. Failure to complete this necessary step may result in damage to the underground services or cause a potentially dangerous situation.

Contact your local providers to have this service performed. The utility representative should leave a document with you to indicate there is no conflict with the area designated for the new play structure.

11 Gilbertson Drive P.O. Box 68 Simcoe, Ontario, Canada N3Y 4K8 1-800-265-5462 Fax (519) 426-1132

Play Structure Site Excavation Details

All play structures must be installed on a flat and level surface to ensure that the end result is compliant with the CSA (or ASTM) standard. Depending on the physical site, the type of containment border and protective surfacing material chosen, there are several methods of site preparation that will produce acceptable results. Pit Depths or Border Heights will vary depending on surfacing material.

Some examples of the installation types are shown below in sectional views. In all cases, the grade on which the protective surfacing will be installed must be **FLAT** and **LEVEL**. The perimeter dimensions of the protective surface zone required for your equipment are indicated on the drawings that were provided to you.

⚠WARNING

Installation Over A Hard Surface Such As Concrete, Asphalt, Or Packed Earth May Result In Serious Injury Or Death From Falls.

Filter cloth, drainage tiles, borders or protective surfacing material should not be installed prior to the installation of the play structure as any of these can be easily damaged due to the construction activity.

1. TYPICAL 12" DEPTH PIT ON RELATIVELY LEVEL GRADE

Typically used for loose fill protective surface materials such as sand, gravel, wood chips and engineered wood fibers.
Best for containing loose fill materials and maintaining a rigid border.

2. TYPICAL 12" DEPTH PIT ON SLOPING GRADE

3. INSTALLED ON FINISHED GRADE - MUST BE FLAT AND LEVEL

Easiest and most cost effective if grade conditions allow. However it may be difficult to maintain the border in place when using loose fill materials do to the outward pressure of the loose fill material.

11 Gilbertson Drive P.O. Box 68 Simcoe, Ontario, Canada N3Y 4K8 1-800-265-5462 Fax (519) 426-1132

Understanding Your Layout Drawing

Before beginning the installation of your play structure, study your layout drawing, 3d drawing, and component installation instructions carefully.

IMPORTANT

The required site dimensions are marked on the layout drawing and should be compared to the actual area to ensure that the play structure will fit. This overall bordered area includes the actual play structure plus a minimum protective surface area that extends to cover the zone of use. Note any no-encroachment zones (Canada only) on your layout drawing. This extra space is required for certain play components such as slides, swings and certain rotating equipment and is intended to allow pedestrian traffic near the play equipment in use while minimizing the risk of injury to pedestrians. Depending on the layout arrangement, a no-encroachment zone does not require protective surfacing but must be free of obstructions that would hinder free pedestrian movement.

Your layout drawing is used to identify post locations. The numbers at the post bases coincide with the numbers on the bottoms of the actual structure posts.

Your layout drawing is also marked with a scale key that can be used to obtain additional measurements not directly provided.

Laying Out Your Play Structure

Always begin by measuring the prepared site to ensure that it is large enough to safely contain your play structure, including all required safety zones. If the site is not large enough, your play structure will not comply with the CSA (Canada) or the ASTM (U.S.) standard.

Unless otherwise specified, face the play structure so that any stainless steel slides face north or east to avoid heating by the sun.

It is generally easier to install a play structure from the lowest to the highest deck. Lower decks are typically supported by shorter posts.

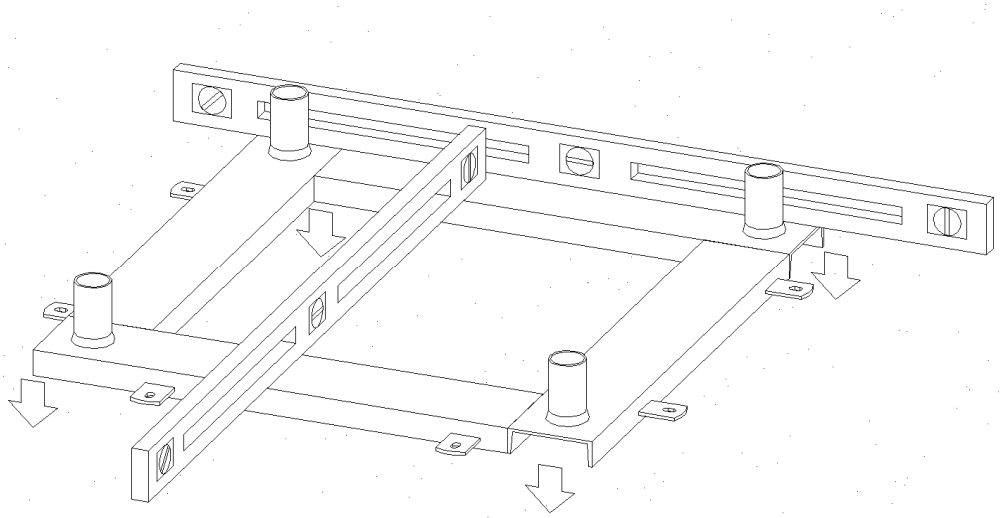
Your layout drawing will contain a starting dimension from the edge of the site to the lowest deck. Other optional starting points will also be dimensioned. Use the scale key for measurements if you wish to start at a location not directly dimensioned.

Once you have determined a starting point, translate this point into the prepared site by measuring in from the edge of the site. Placement of this point is very important because all other points depend on its accuracy. Once the starting point is located in the prepared site, confirm that there is enough area in the opposite directions to safely contain the play structure.

Laying Out and Levelling Channel Base

Now that you have your starting point located, place channel base (with channel flanges down) with one stub (facing up) at starting point. Rotate the channel base until the other three stubs are located proper measurements as indicated on the layout drawing.

Once the channel base is in the proper location, level it in both directions end to end and side to side. Do this, by digging down (with shovel) or driving down (with a sledge hammer) making the channel level in both directions. If using a sledgehammer be sure only to hit the channel on the edges and not in the middle, doing so could cause bending of the channel.



Assembly Of Posts And Decks

Now that the first channel base is in place and level, locate the numbered posts for the appropriate locations according to the layout and 3-d drawing. Place the numbered posts in proper stub and fasten using the hardware identified in the deck installation instruction.

Now, use the same procedure (as for the first channel base) to layout and level, the remaining channel bases.

Laying out and levelling Channel Sections and Ground Braces for Components

See the layout drawing and components installation instructions regarding layout of the appropriate length channel sections and ground braces for the installation of each component. These components include slides, climbers, and stairs. Complete the levelling channel sections and ground braces for all the components, before continuing.

Continually check your dimensions to make sure you are running true within the site. Each component that is added to the play structure makes it more difficult to readjust the direction of the play structure. Should you find the unit veering off in a direction that may cause your protective surfacing zone to be smaller than anticipated, correct the problem before continuing to add the remaining components.

Component Installation

Once all decks and channel sections and ground braces have been attached, it is time to install all the components. These components include panels, slides, climbers, and stairs. The attached individual installation instructions will detail assembly procedure for these components.

Checking

Once assembly is complete, do a final check before proceeding. Ensure that all posts are plumb on all sides. All decks should be level and adjusted to the correct height for the amount of protective surfacing required. Ensure all components are attached per their instructions. Finally, ensure that all fasteners are tight and firmly secured. Do not overtighten fasteners. See Torque Requirements.

Torque Requirements

The following are target torque values for typical fasteners. The actual values should be determined by means of a torque wrench. The torque values given are (unless otherwise noted) typical for all lengths of the given fastener size.

Size	Description	Torque in*lbs
1/4"	Carriage Bolt	66
5/16"	Carriage Bolt	132
3/8"	Carriage Bolt	240
7/16"	Carriage Bolt	600
1/2"	Carriage Bolt	600
3/8"	Eye Bolt	240
3/8"	Machine Bolt	240
7/16" x 2 1/2"	Machine Bolt	600
7/16"	Machine Bolt	384
1/2"	Machine Bolt	600
5/16"	Truss Bolt	132
3/8" x 3/4"	Button head Cap Screw	540
3/8"	Button head Cap Screw	240
3/8"	Flat Head Hex Socket Cap Screw	240
5/16"	Hex Head Lag Screw	132
3/8"	Hex Head Lag Screw	240
3/8" x 1/4"	Set Screw	130
3/8" x 3/8"	Set Screw	240
1/2" x 1/2"	Set Screw	316

Protective Surfacing Installation

Install protective surface material after all final checks. The protective surfacing should be evenly distributed and raked level. The playground should not be opened until this step is complete.

Installation Safety

While installing any playground equipment, if the site must be left unattended, make sure the area is left safe. Clean up all tools, cover all open ground holes, and erect a snow fence or other barrier to keep children out of the area.

Installation of playground equipment should be carried out strictly in accordance with the manufacturer's recommendations.

Recycling

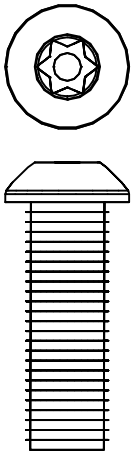
Many of our packaging materials can be recycled. Please take the time to separate and deliver them to a recycling centre. Thank you!

11 Gilbertson Drive P.O. Box 68 Simcoe, Ontario, Canada N3Y 4K8 1-800-265-5462 Fax (519) 426-1132

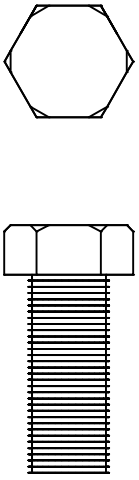
Typical Hardware Key

(For Identification of Parts)

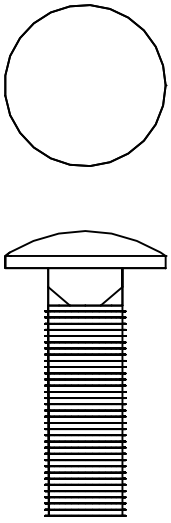
3/8 " Set Screw



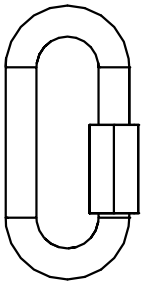
3/8" Button Cap Torx w/Pin



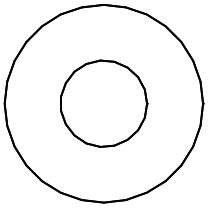
3/8" Machine Bolts



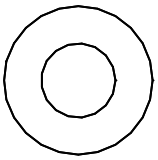
3/8" Carriage Bolt



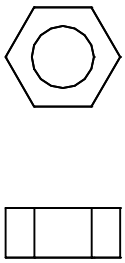
5/16" Quick Link



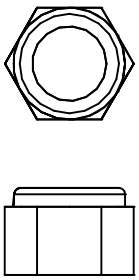
3/8" Flat Washer



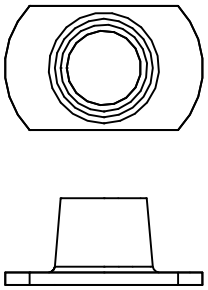
5/16" Flat Washer



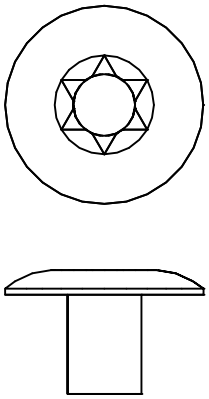
Hex Nut



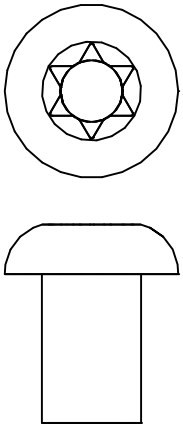
Lock Nut w/ Nylon Locking



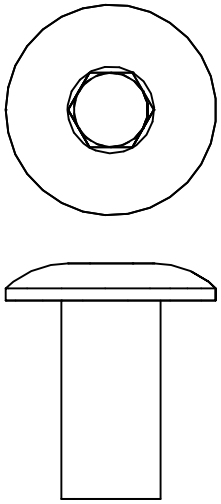
T-Nut



Camtainer Nut



Barrel Nut



Spenco Nut

Due to hardware shortages, we have replaced the locking flange nut with a 5/16 flatwasher and lock nut 3/8”-16 UNC.

Wherever you see this locking flange nut in the installation instructions, please substitute with a washer and locknut.