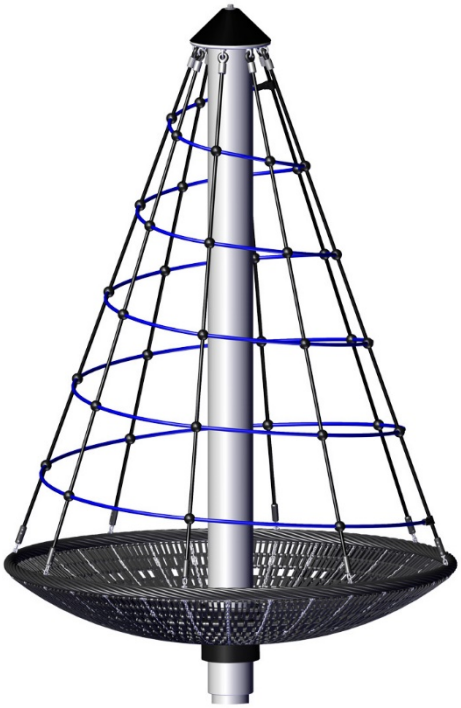
Installation Instructions



Spiral Carousel

Model No. 20.01.120

Revision History

Initial Release: 6/29/2021

Printed in USA

NetPlay™ USA LLC

3-D Adventure Play & Innovation

Contents

Please read through the entire installation instructions upon receipt to ensure that all parts have been received and that all customer-supplied materials are procured prior to the start of installation.

Introduction

Thank you for purchasing the Spiral Carousel! Before we begin, please take some time to familiarize yourself with the components, tools, and installation steps to ensure adequate preparation for a smooth installation.

General Information

This equipment should be installed, inspected, maintained, and operated in accordance with ASTM F1487-17 or CSA-Z614 guidelines.

The installation site shall have a flat and level surface with a maximum slope of 3%.

For product support, including questions regarding installation, or to obtain replacement parts, please contact your equipment dealer.

Following installation, the complete assembly instructions, maintenance instructions, and maintenance records must be sent to the operator who must confirm receipt in writing. See the last page of this document.

We hereby confirm that this play equipment has been tested and certified in accordance with the play equipment standards ASTM F1487-17 and CSA-Z614.

Drawings/Views

The manufacturer reserves the right to make reasonable changes to technical details of our products for enhanced safety and assurance for users and operators.

Measurement Tolerances

Due to the properties and characteristics of the components above surfacing level, actual measurements may vary from those indicated in the diagrams. The manufacturer has established safe tolerances for these components.

Specifications

Assembly Time..... 2 hours
(after completion of foundations)

Personnel Required 2-3

Equipment

Height..... 118.25 in (3,000 mm)

Footprint..... Ø 78.75 in
(Ø 2,000 mm)

Use Zone..... Ø 295 in (Ø 7,493 mm)
Ø 223 (Ø 5,665 mm) No Overlap

Fall Height ..... 92.5 in (2,350 mm)

Age Group ..... 5 to 12 years

Capacity 16

Largest Component: Post..... 149.63 in x Ø 6.25 in
(3,800 mm x Ø 159 mm)

Heaviest Component: Post ..... 213 lb (96.6 kg)

Foundation

Concrete Mix C25/C30

Required Concrete:..... 36.5 ft^3 (1.04 m^3) foundations
0.3 ft^3 (0.009 m^3) pipe fill

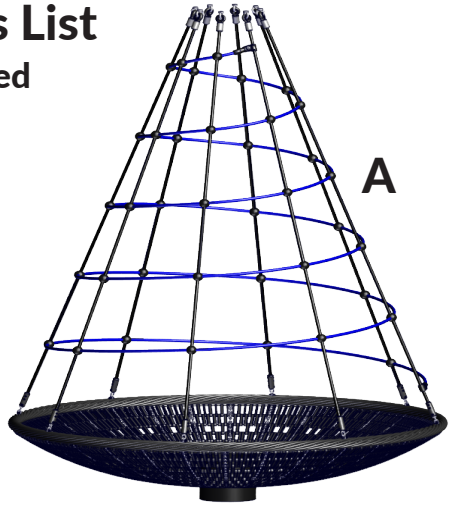
Foundation Dimensions..... 51.2 x 51.2 x 23.5 inches
(1,300 x 1,300 x 600 mm)

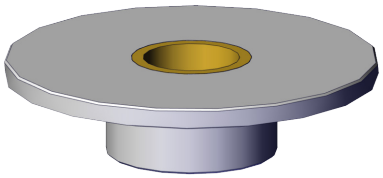
Drainage Stone..... 6.1 ft^3 (0.18 m^3)
(4 inches of stone required beneath the foundation)

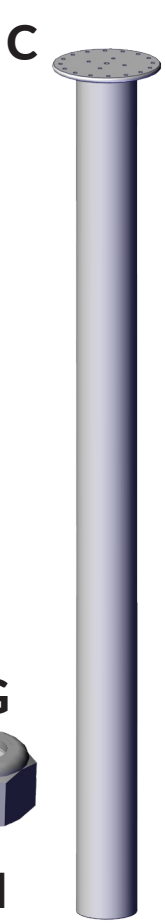
In the case of sandy and soft soils, the size of the foundation must be enlarged by 50%.

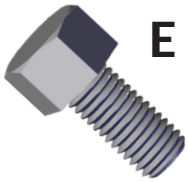
Parts List

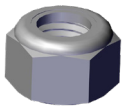
Included

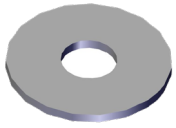


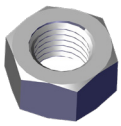


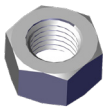




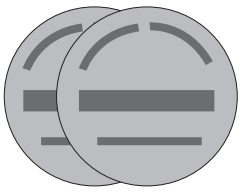


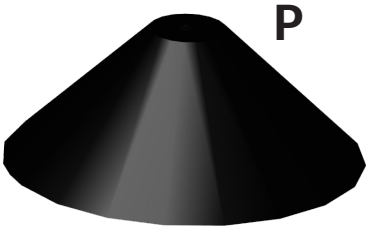






Part	Description	Qty Ship	Qty Rec
A	Component Assembly	1	
B	Bearing Plate	1	
C	Outer Post	1	
D	Inner Post	1	
E	M12 Bolts	8	
F	M12 Toothed Washers	8	
G	M16 Locknut	1	
H	M16 Flat Washer	1	
I	M16 Hex Nut	1	
J	M12 Hex Nut	2	
K	Torx Screw	6	
L	M16 Threaded Rod	1	
M	M12 Threaded Rod	1	
N	Thread Locking Adhesive	1	
O	Gap Ring	1	
P	Post Cap	1	
Q	Compliance Stickers	2	



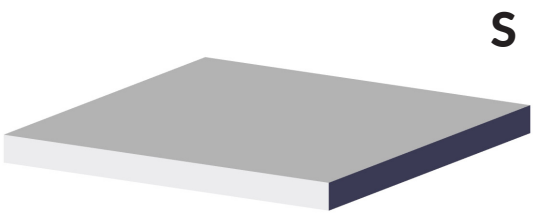


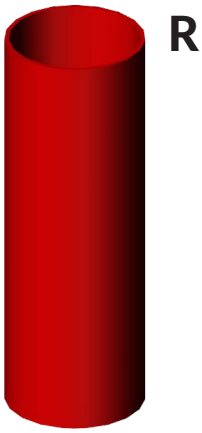
Parts List

Customer-Supplied

These components must be procured prior to installation.
For concrete and stone requirements, please see the foundation specifications on page 3.

Part	Description	Qty
R	Middle Foundation Pipe ø 8 in x 26 in Schedule 40 (ø 200 mm x 650 mm)	1
S	Concrete Slab About 12 x 12 in (300 x 300 mm)	1





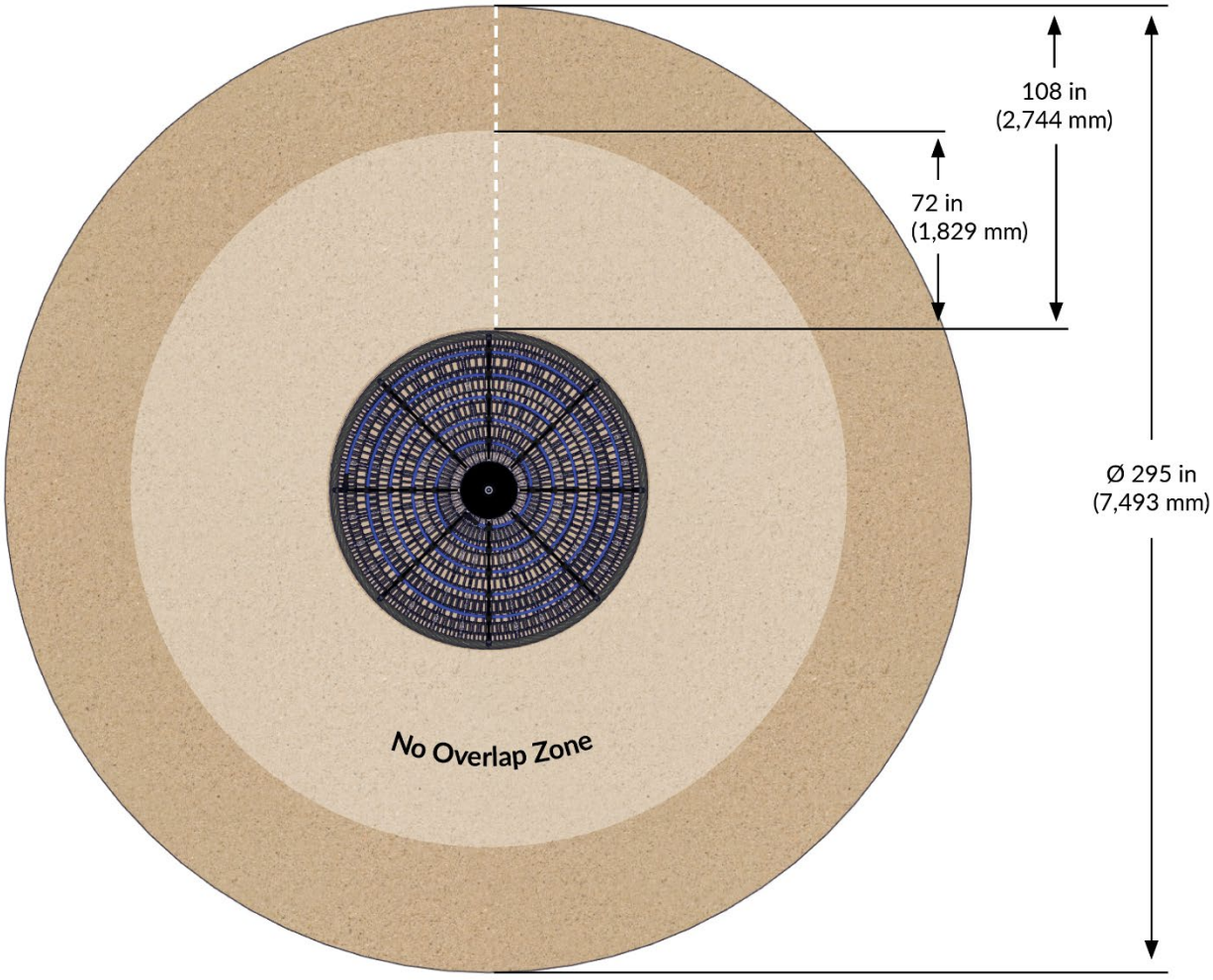
Installation

Part A: Site Prep and Use Zone

Be sure that the chosen site is well drained and level, with a 3% maximum slope.

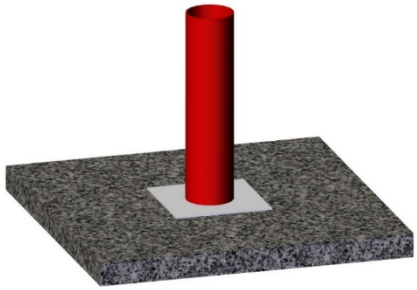
A clear path and adequate protective surfacing are required 108 inches (2,744 mm) from the outer edge of the rotating platform as shown below.

The use zone 72 inches (1,829 mm) out from the perimeter of the Spiral Carousel may not overlap any other use zone.

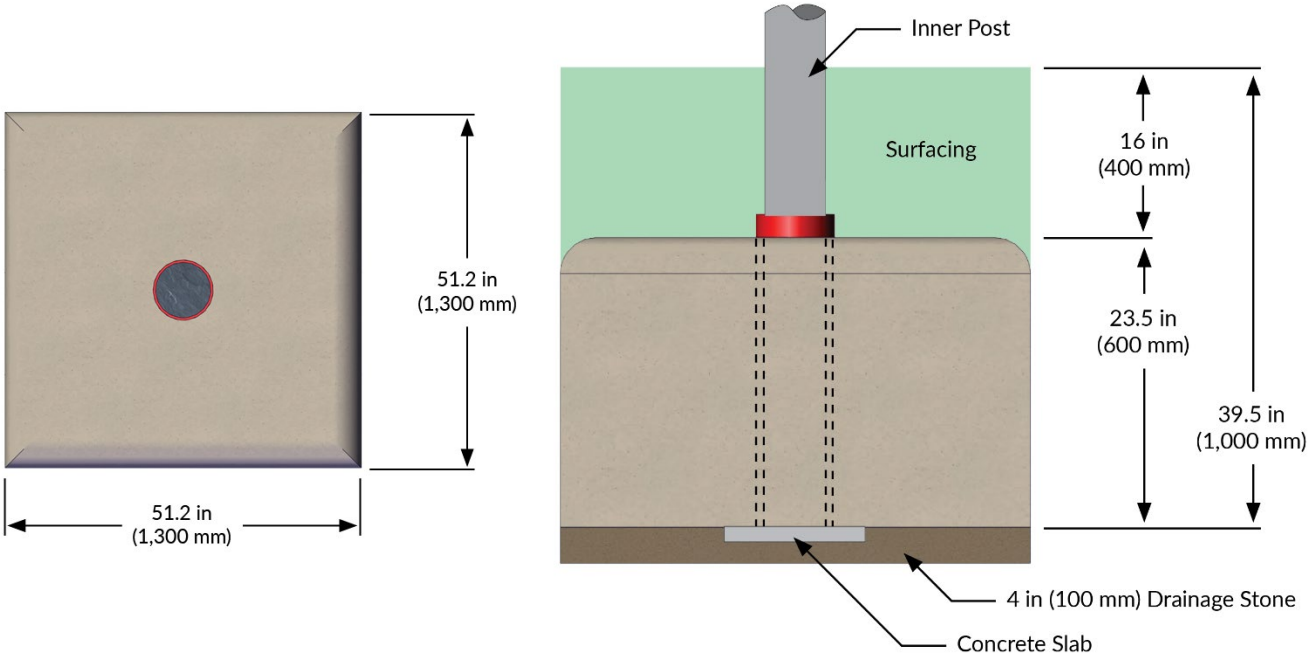


Installation

Part B: Foundation



- A concrete foundation is required for the Spiral Carousel.
- Dig a foundation hole 51.2 x 51.2 inches wide and 43.5 inches deep, measured from the top of the intended surfacing level.
- Add 4 inches of drainage stone to the bottom of the foundation hole.
- In the center of the foundation hole, nestle the concrete slab into the drainage stone so that the top of the slab is flush with the top of the stone. Check that the depth from the top of the concrete slab to the intended top level of surfacing is 39.5 inches. Adjust as needed.
- Place the foundation pipe on-end onto the concrete slab as shown. Check that the slab is level and the pipe is perfectly straight.
- Measure 23.5 inches (600 mm) above the top of the drainage stone and slab. Mark this point on the pipe or inside foundation wall. Pour concrete into the foundation hole, around the pipe, until the concrete level reaches the 23.5 inch mark.
- Round the top edges of the foundation to a 4 inch radius and allow to set for the concrete manufacturer's recommended time.



The required material depth (subgrade + surfacing) of 16 inches (400 mm) is critical to meet the manufacturer's specifications for safe use and compliance.

Apply at least 5 drops of thread locking adhesive to the threads of all nuts, bolts, screws, and turnbuckles when installing. Do not apply thread locking adhesive to locknut.

In addition, the threads of stainless steel hardware must also be sprayed with Teflon spray or similar lubricant (not included) to prevent cold welding.

Stainless Steel Hardware:

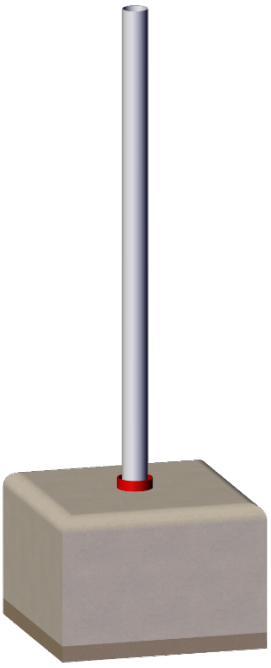
- **M16 Hex Nut and Threaded Rod**
- **Eye Nuts and M12 Bolts**

Installation

Part C: Structure

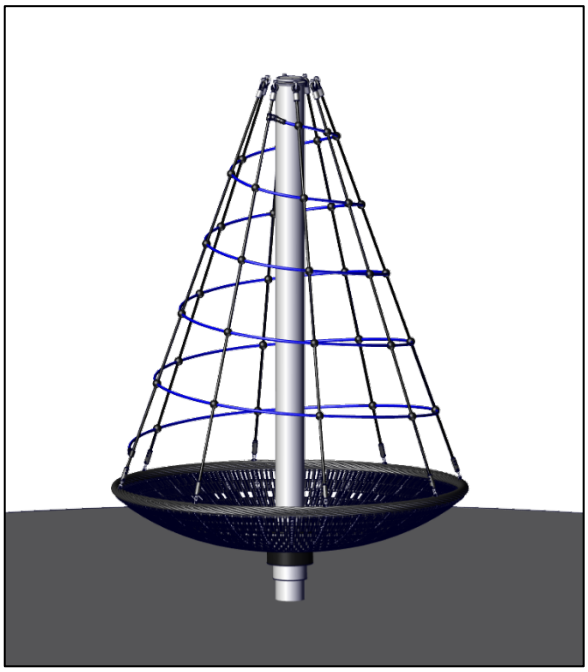
- Slide the M12 threaded rod through the holes at the base of the inner post and secure on each end with M12 hex nuts tightened against the post as shown below. Be sure the rod is centered in the post.
- Insert the base of the inner post into the foundation pipe so the end of the post is flat on the slab. Use a level to ensure that the pipe is straight.

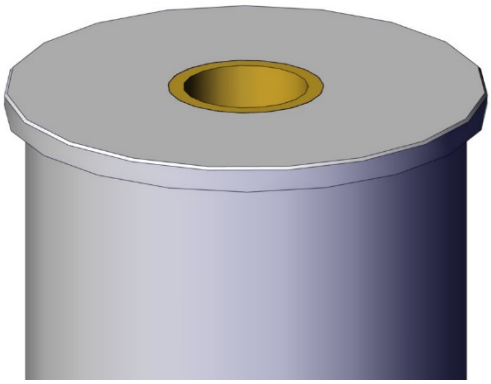
Note: Your post may have two sets of holes. Please install the one threaded rod into one of either sets of holes.



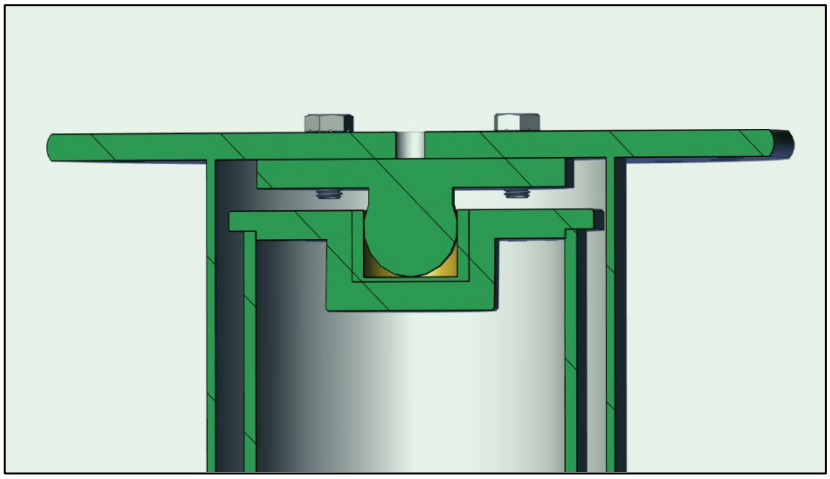
- Pour concrete into the foundation pipe, ensuring the post is straight, and allow to dry for the manufacturer's recommended amount of time.

- Once the concrete has completely hardened, slide the spinner assembly over the post through the collar at the center of the Bird's Nest.
- Seat the bearing plate on top of the post.

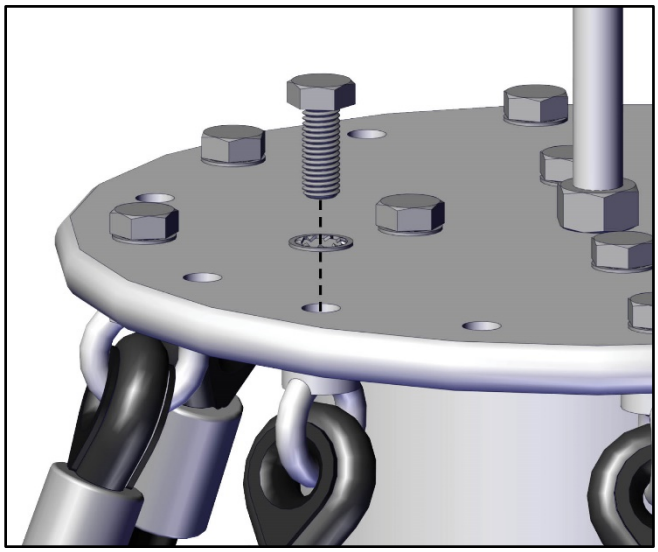


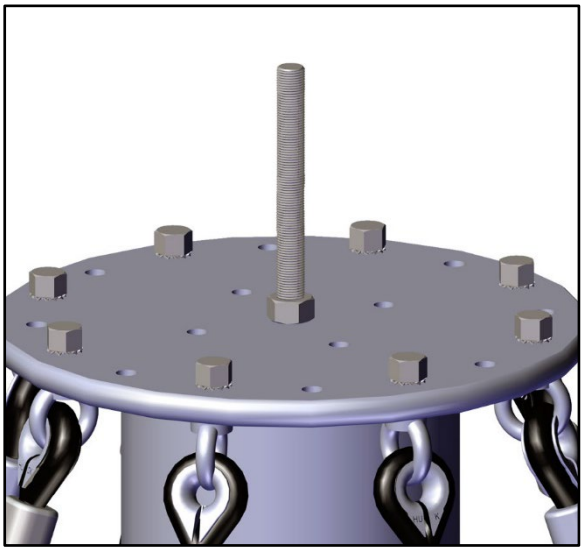


- Slide the outer post down over the inner post until the ball inside the top plate is seated into the bearing plate (you won't be able to see it, but when seated properly the outer post will rotate freely). The outer post fits over the bottom friction sleeve of the inner post, and inside the collar at the center of the Bird's Nest.

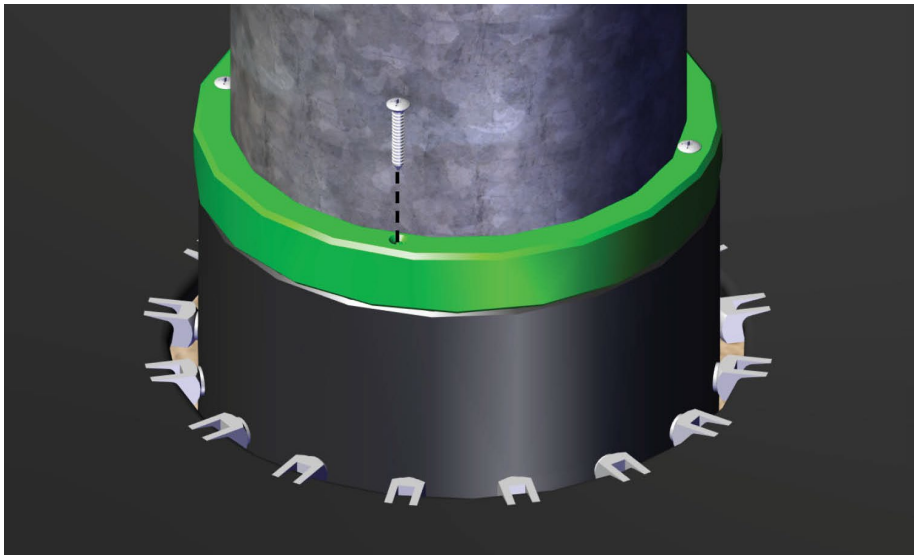


- Connect each spinner support rope to the top plate. Use the 8 M12 bolts and 8 toothed lock washers to attach the eye nuts at the end of each rope to the underside of the top plate as shown. Attach to every other perimeter hole in the top plate.
- Thread the M16 threaded rod into the center hole of the top plate about one inch. Add the washer then the hex nut and tighten against the top plate to secure the rod.





- Adjust the spinner assembly so that the ropes lay straight from the top plate to the Bird's Nest ring. Fit the two halves of the gap ring (shown in green below) around the post, seated on top of the Bird's Nest collar. Hold the ring close but not tight against the post, then use the six Torx screws to anchor the ring to the collar.



- Place the post cap over the top plate as shown, and secure with the washer and lock nut. If the threaded rod protrudes from the tightened lock nut, or if there is not enough thread, remove the post cap and adjust the height of the rod.

Finishing

- Add and grade 16 in (400 mm) surfacing per ASTM F1292 to the use zone. With surfacing, the final height of the carousel should be about 118.25 inches (3,000 mm).
- If using loose fill surfacing material, mark the post at the final level of the surfacing so that the proper level can be maintained.
- Place the compliance stickers on the carousel outer post in an accessible location.
- Clean up the area and remove all tools, extra materials, or other assembly aids before opening the equipment for use.

Final Checklist

- ☐ The Spiral Carousel was installed according to the instructions without modification, except if instructed by the equipment supplier.
- ☐ Check foundation stability.
- ☐ Proper surfacing has been added and fall heights checked.
- ☐ Compliance stickers have been adhered and are visible.
- ☐ Recheck all measurements for ASTM F1487 or CSA-Z614 conformity.

Maintenance

To maintain safety, the operator must ensure that proper inspection and maintenance is carried out by a competent person in accordance with ASTM F1487-17 or CSA-Z614, and the following manufacturer recommendations.

Damage which may compromise safety must be repaired immediately. If repairs cannot be immediately carried out, the operator must close the equipment to prevent use.

Replacement Parts

Replacement parts may be obtained through your equipment dealer. Parts not obtained through a dealer must conform to the manufacturer's specifications.

Break-in Period

Between 1-2 weeks after installation (equipment break-in period), check all threaded connections and tighten if necessary.

Inspection Frequency

We strongly advise you to carry out inspections and maintenance work within the specified periods as use of the equipment, the weather and malicious vandalism cause wear and tear that compromises the safety and function of the equipment.

With average use and environmental conditions, check the following at or before the recommended frequency. If the equipment is exposed to high-use or harsh environments, the inspections should be performed at a shorter frequency. Inspections should also be completed per ASTM 1487-17 or CSA-Z614 guidelines.

<u>Monthly</u>

- Check all connections and fittings for wear and tear and tighten if necessary. Repair or replace damaged or missing parts.
- Check ropes for excessive wear. If ropes are worn through to the steel wire core, the equipment should be closed to prevent use until the rope is repaired or replaced.
- Check surfacing for adequate depth and fill in as necessary.
- Check the ground surface of fall protection for hard objects.
- Check that moving metal parts (bearing, post assembly) move smoothly and are not worn. Do not lubricate the bearing.

Quarterly

- Detailed inspection of the operation and stability of the equipment paying particular attention to any wear and tear.
- Check the stability of the foundation and post.
- Tighten all forms of attachment.

Yearly

- Check for corrosion on metal components. Apply zinc paint to any corroded or scratched areas.

Maintenance Log

Copy and return to the owner/operator annually following initial inspection.

Name of operator
(town, school, business, etc.): _____

Equipment Location: _____

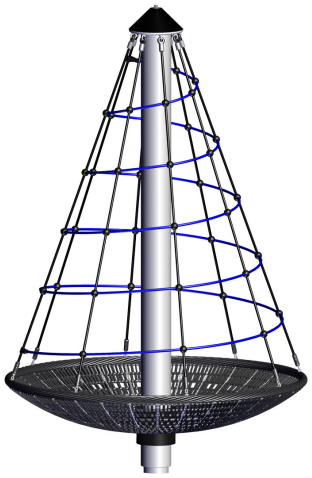
Model Name: Spiral Carousel

Model Number: 20.01.120S

Serial Number: _____

Date of Inspection	Inspector	Fault? Yes/No	Details	Repaired By	Repair Date

New Product Handover



NetPlay USA LLC
3-D Adventure Play & Innovation

Model Name: Spiral Carousel

Model Number: 20.01.120S

Serial Number: _____

Operator

Name of operator (town, school, business, etc.): _____

Street: _____ City: _____ State: _____ Zip: _____

Representative in charge: _____

Installer

Name of installation company: _____

Street: _____ City: _____ State: _____ Zip: _____

Representative in charge: _____

Installer Checklist:

- ☐ Adequate concrete foundation poured per instructions.
- ☐ Structure assembled per the instructions without modification (unless approved by the manufacturer.)
- ☐ Final inspection conducted and passed per instructions.

Operator received the complete assembly instructions, inspection & maintenance instructions, and maintenance log. Installer completed work to the manufacturer's specifications.

Operator Signature: _____ Date: _____

Installer Signature: _____ Date: _____