

**IMPORTANT NOTES: Read First**

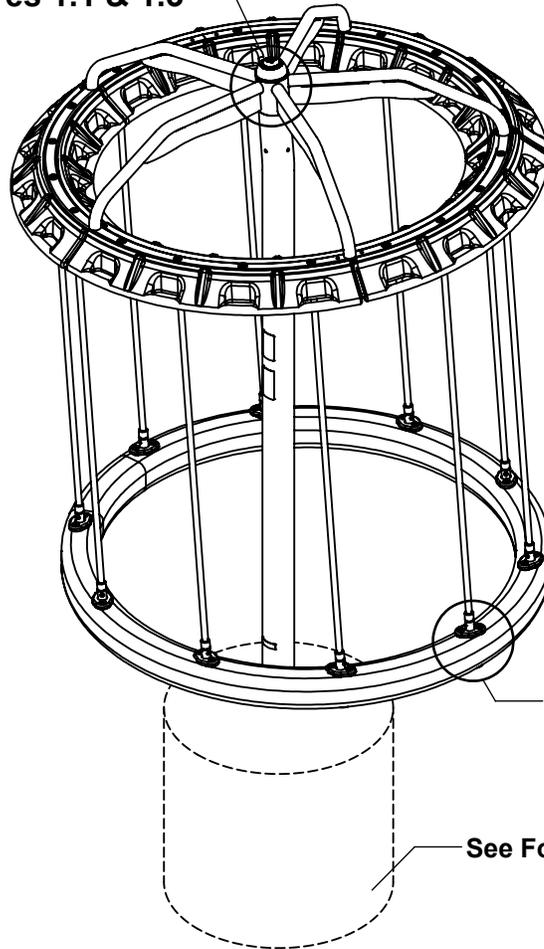
(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(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) 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](http://www.cpsc.gov) for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

**FIGURE 1**  
Neutron Carousel

Figures 1.1 & 1.3



Figures 1.2 & 1.4

See Footing Detail

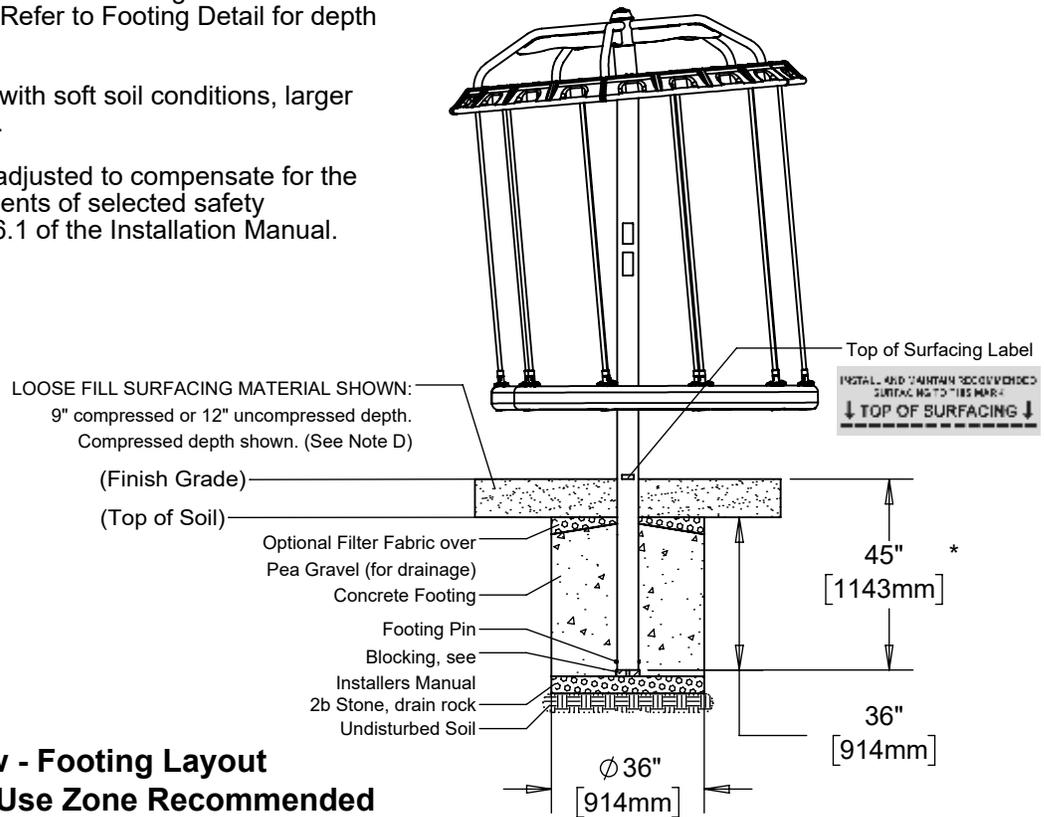
# Step 1

Refer to Footing Layout and mark footing hole location. Dig 1 Ø 36" footing hole. Refer to Footing Detail for depth and details.

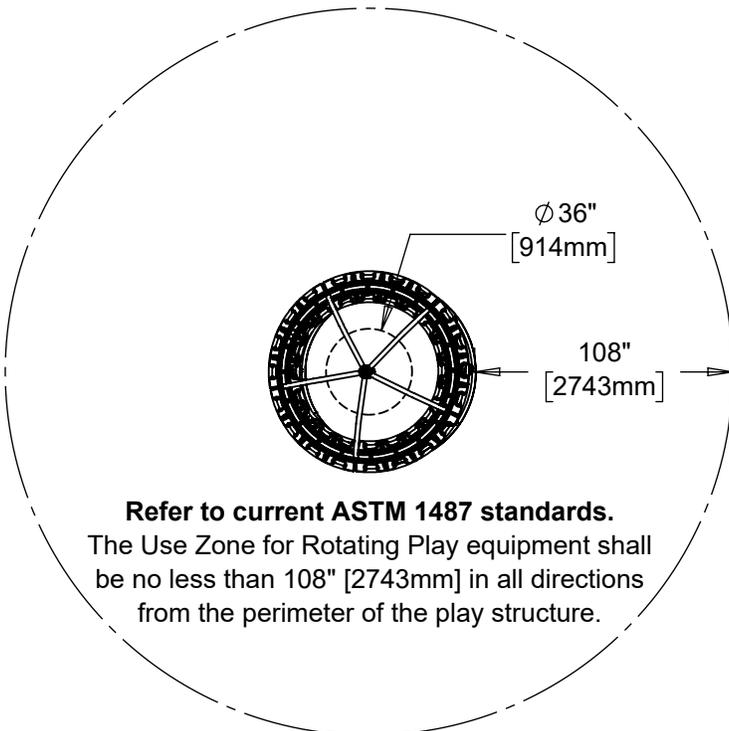
**IMPORTANT:** For areas with soft soil conditions, larger footings may be required.

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

## Footing Detail



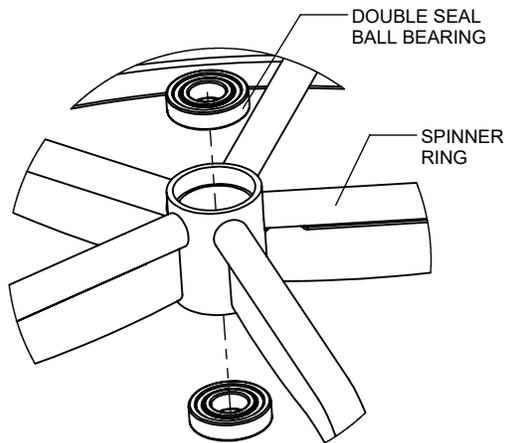
## Top View - Footing Layout 108" [2743mm] Use Zone Recommended



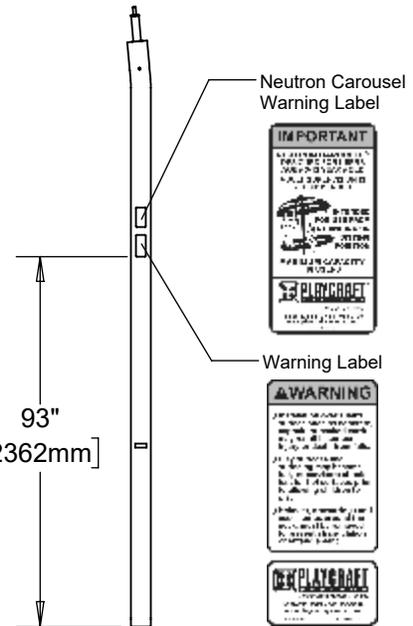
Refer to current ASTM 1487 standards.  
The Use Zone for Rotating Play equipment shall be no less than 108" [2743mm] in all directions from the perimeter of the play structure.

## Step 2 (Factory Assembled)

Apply the Surfacing Warning Label to the Neutron Spinner Post where visible to users as shown in Figure 2.



**Figure 1.1**



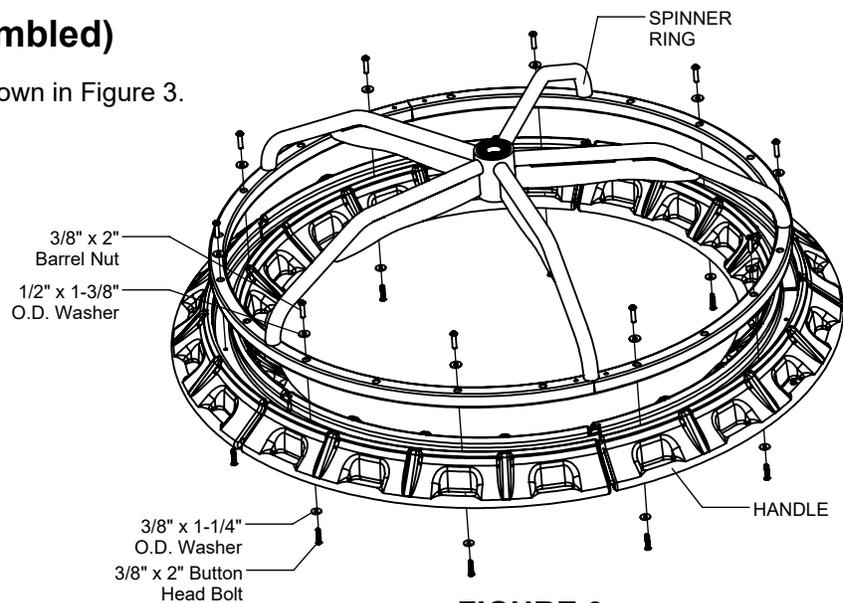
**FIGURE 2**

## Step 3 (Factory Assembled)

Insert Double Seal Ball Bearings into Spinner Ring as shown in Figure 1.1.

## Step 4 (Factory Assembled)

Attach Handles to Spinner Ring as shown in Figure 3.  
(See Note A)

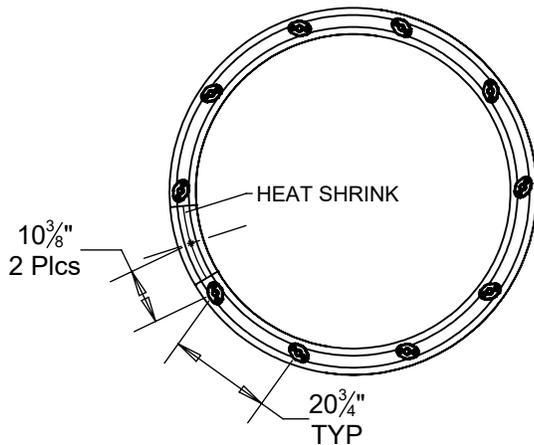


**FIGURE 3**

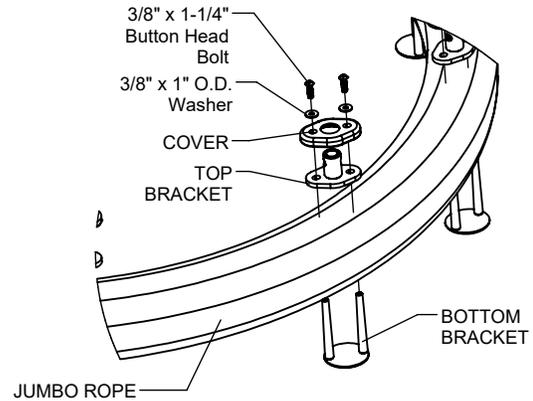
## Step 5 (Factory Assembled)

Attach Jumbo Rope Brackets to Jumbo Rope as shown in Figure 1.2. (See Note A)

Reference Figure 4 for Bracket locations.



**FIGURE 4**



**Figure 1.2**

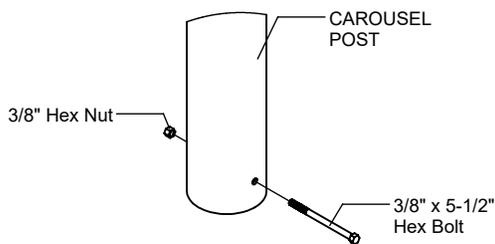
## Step 6

Install Footing Pin into Post as shown in Figure 5. (See Note A)

## Step 7

Place Neutron Carousel Post into footing hole. Plumb and level post. Pour concrete into footing hole and allow at least 72 hours for concrete to cure before proceeding to next step. (See Note B)

**IMPOTRANT:** Slide Jumbo Rope over Neutron Carousel Post before continuing assembly.

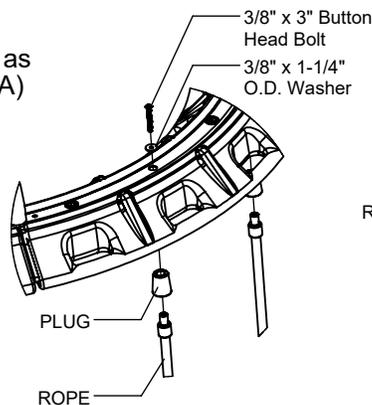


**FIGURE 5**

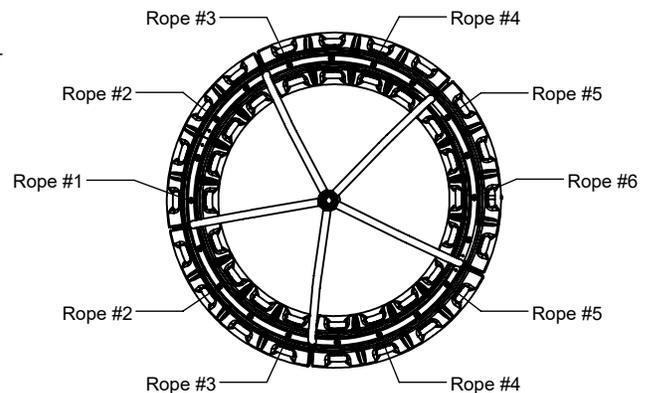
## Step 8

Attach Ropes to Spinner Ring as shown in Figure 6. (See Note A)

Refer to Figure 7 for rope configuration locations.



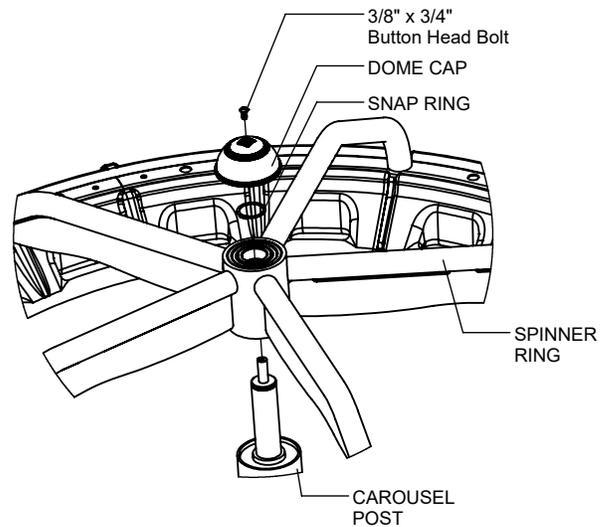
**FIGURE 6**



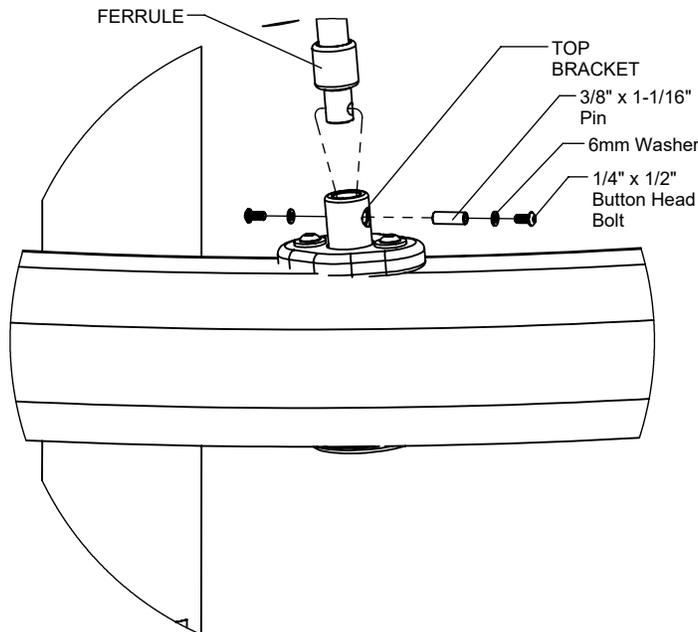
**FIGURE 7**

## Step 9

Attach Spinner Ring to Post as shown in Figure 1.3.  
(See Note A)



**Figure 1.3**



**Figure 1.4**

## Step 10

Attach Ropes to Jumbo Rope as shown in Figure 1.4. (See Note A)

## Step 11

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

## Step 12

Affix "Top of Surfacing" label to base of post indicating the top of minimum required surfacing depth. (See Note C)

## Step 13

Place required protective surfacing under and around Neutron Carousel. (See Note C)

## Parts List

Part #	DESCRIPTION	QTY
GF-4826	Neutron Spinner Cap Modified R5 Dome	1
HE-0109-1	Neutron Carousel Rope 1	1
HE-0109-2	Neutron Carousel Rope 2	2
HE-0109-3	Neutron Carousel Rope 3	2
HE-0109-4	Neutron Carousel Rope 4	2
HE-0109-5	Neutron Carousel Rope 5	2
HE-0109-6	Neutron Carousel Rope 6	1
IE-0077	3/8" x 1-1/16" x 1/4-20 Threaded Pin	10
IE-0133	Neutron Carousel Spinner Ferrule Plug	10
372017	Top of Surfacing Label	1
480320	External Snap Ring	1
9101012-TR	Bolt Button Head 1/4" x 1/2"	20
9103032-TR	Bolt Button Head 3/8" x 3/4"	1
9103132-TR	Bolt Button Head 3/8" x 3"	10
9123231	Bolt Hex 3/8" x 5-1/2"	1
9333062	Washer Flat 3/8" x 1-1/4" x .125	10
9333602	Washer Flat 6 mm	20
9483602	Nut Hex 3/8"	1

## Assembled Parts List

Part #	DESCRIPTION	QTY
DE-4814	Neutron Spinner Handle	5
EE-0648	Jumbo Rope HDPE Cover-140	10
FS-PC2485-BB	Jumbo Rope Bottom Bracket-140	10
FS-PC2485-CB	Jumbo Rope Top Bracket-140	10
FS-PC2485-CP	Neutron Carousel Post with Spindle	1
FS-PC2485-RING	Neutron Spinner Ring	1
HE-0108	Neutron Carousel Jumbo Rope	1
372016	Warning Label	1
372023	Neutron Carousel Warning Label	1
481631	Double Seal Ball Bearing	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	20
9103092-TR	Bolt Button Head 3/8" x 2"	10
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	20
9333062	Washer Flat 3/8" x 1-1/4" x .125	10
9335062-5	Washer Flat 1/2" x 1-3/8" OD	10
9443092-TR	Nut Barrel 3/8" x 2" BH	10

## Specifications

### NEUTRON SPINNER HANDLE:

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

### NEUTRON CAROUSEL POST:

Shall be fabricated using 5" O.D. 7 gauge steel tubing with welded 3/8" thick steel plates and machined steel spindle and will have a multi-stage baked-on powder coat finish.

### NEUTRON SPINNER RING:

Shall be fabricated using 2" square 11 gauge steel outer ring with welded 5" O.D. 1/2" thick steel center housing, 1.900" O.D. 11 gauge steel spokes, and 1/4" thick steel gussets and will have a multi-stage baked-on powder coat finish.

### NEUTRON SPINNER DOME CAP:

Shall be precision die-cast from a high-strength aluminum alloy with a Ø7/16" center mounting hole and will have a multi-stage baked-on powder coat finish.

### JUMBO ROPE TOP BRACKETS:

Shall be fabricated using 3/8" precision cut steel with welded machined ferrules and will have a multi-staged baked-on powder coat finish.

### JUMBO ROPE BOTTOM BRACKET:

Shall be fabricated using 3/16" precision cut stainless steel with welded machined tapered pins.

### JUMBO ROPE COVER:

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

### NEUTRON CAROUSEL ROPES:

Shall be made from 16mm steel-reinforced rope with high-strength copolymer plastic intersection connectors and machined aluminum end ferrules.

### NEUTRON CAROUSEL JUMBO ROPE:

Shall be made from 140mm steel-reinforced rope.

### 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.