

## **IMPORTANT NOTES: Read First**

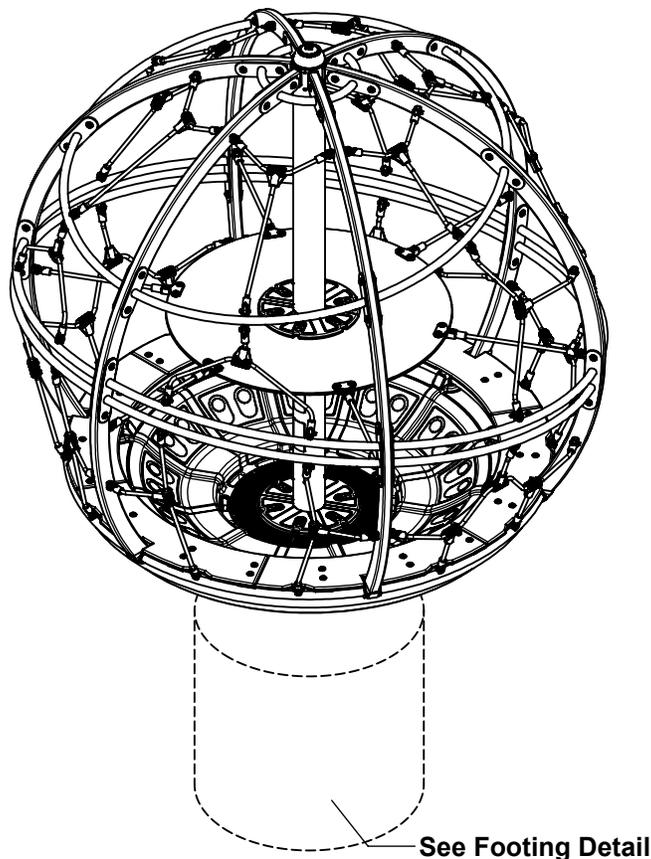
(A) Use liquid thread lock (such as Loctite<sup>®</sup>) with all threaded hardware. **IMPORTANT:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(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) **IMPORTANT:** Initial brake adjustment must be set and periodically maintained to limit the speed of revolutions. Refer to current ASTM 1487 standards. The maximum rotations per minute for Spin Max events shall be no greater than 27. Test with the applied force of a male adult between the ages of 18 to 34, 150 lbs. [68 kgs.] to 190 lbs. [86 kgs.] and 68" [1727 mm] to 73" [1854 mm] tall. If any questions or concerns arise during the installation or maintenance of the Spin-Max brake, please contact the factory and ask to speak to a customer service representative at **1-800-333-8519**.

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

**FIGURE 1**  
Spin-Max Orbit



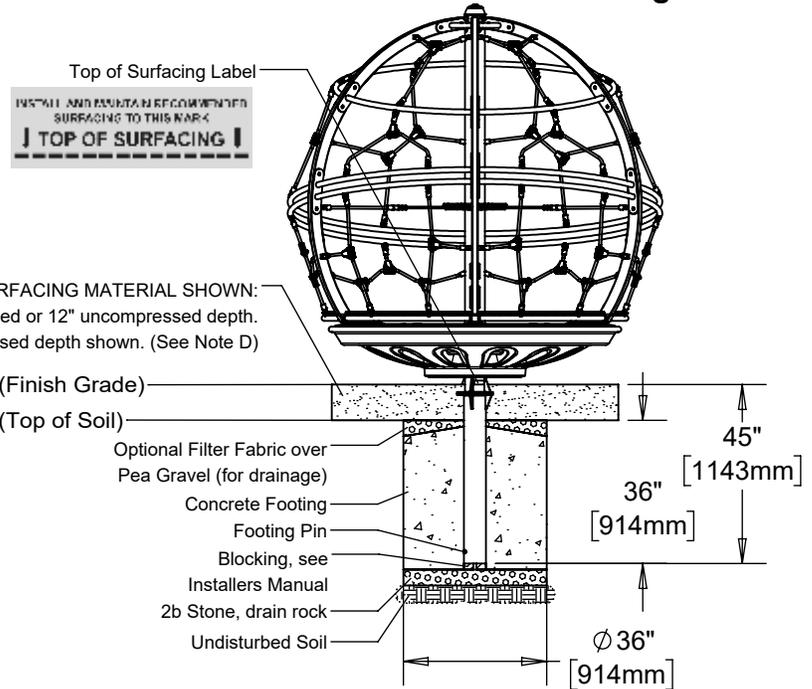
# Step 1

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.

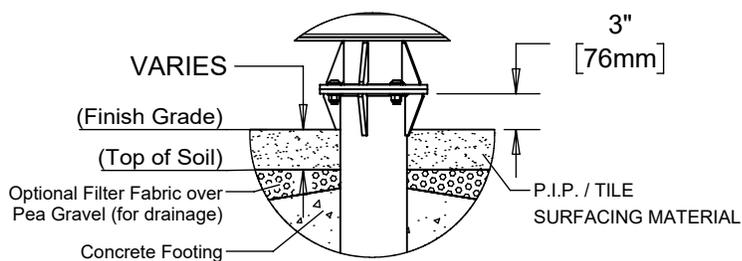
\* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

## Loose Fill Footing Detail

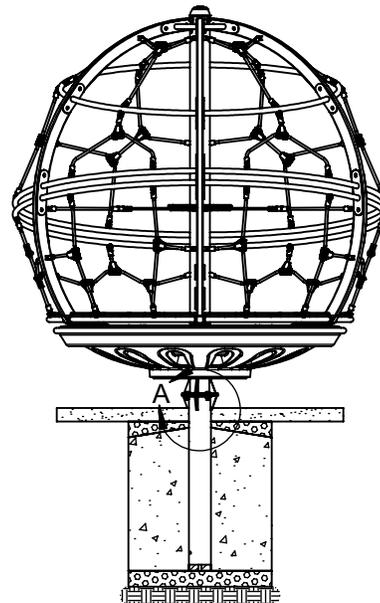


\*\* For P.I.P. / Rubber Tile Surfacing footing depth must be adjusted to ensure Leg Hardware and Speed Limiter Cover are accessible for maintenance.

## P.I.P. / TILE Footing Detail



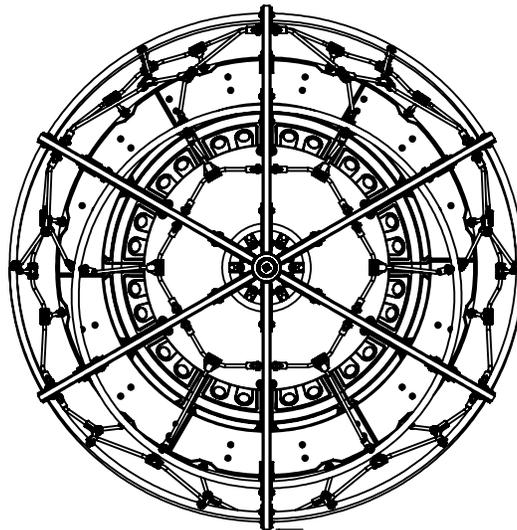
DETAIL A  
SCALE 1 : 16



**Top View - Footing Layout**  
**72" [1829mm] Use Zone Recommended**

**Refer to current ASTM 1487 standards.**

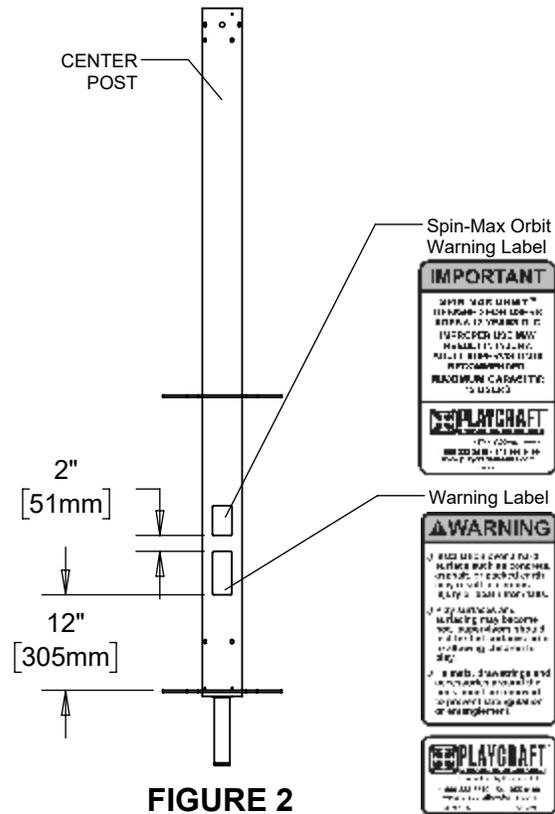
The Use Zone for Rotating Play equipment shall be no less than 72" [1829mm] in all directions from the perimeter of the play structure.



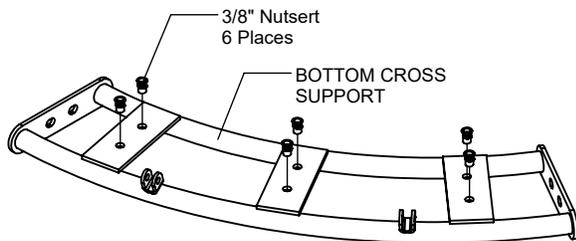
72"  
[1829mm]

## Step 2 (Factory Assembled)

Apply 5-12 Years Age App. Label and Warning Label to Center Post as shown in Figure 2.



**FIGURE 2**



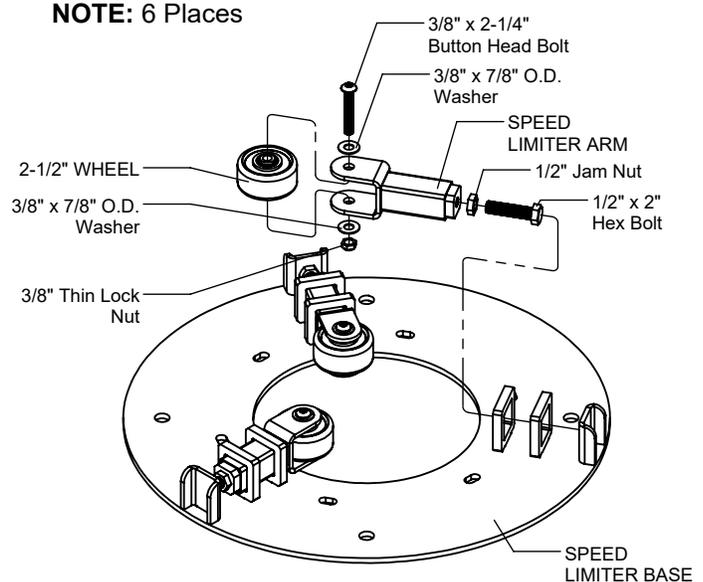
**FIGURE 3**

## Step 4 (Factory Assembled)

Attach 2-1/2" Wheels to Speed Limiter Arms and insert into Speed Limiter Base as shown in Figure 4.

**NOTE:** Do not use liquid thread lock (such as Loctite®) on the 1/2" Jam Nuts and 1/2" x 2" Hex Bolts.

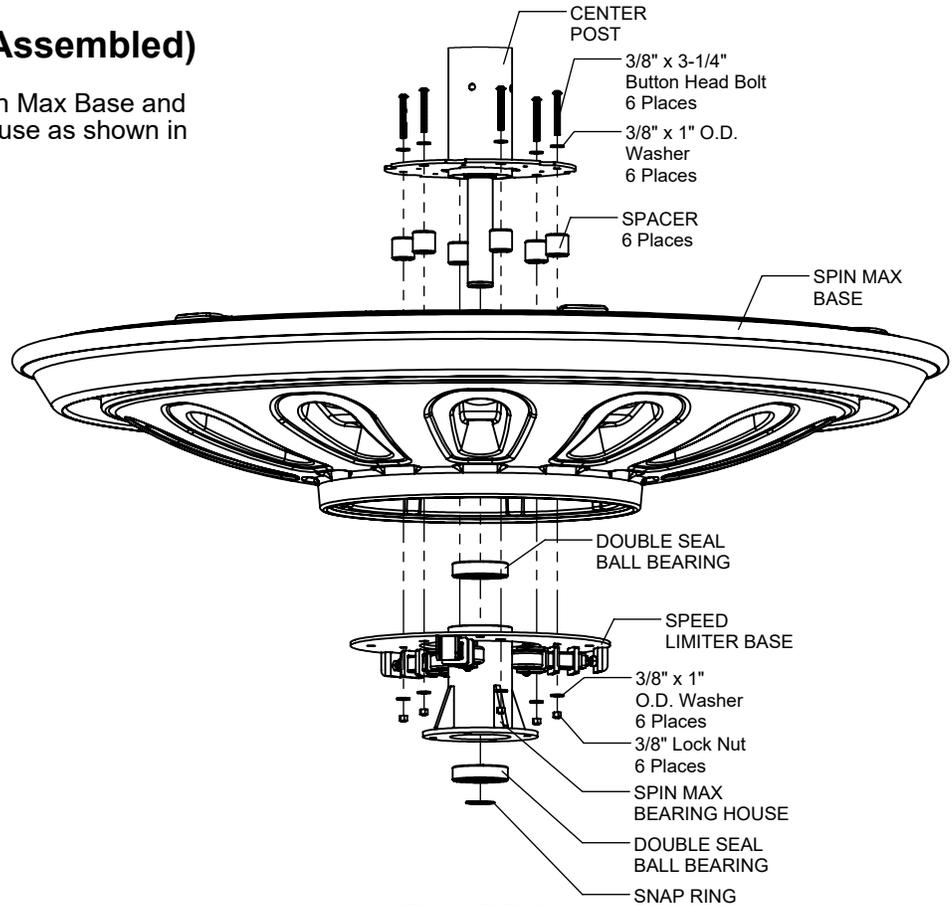
**NOTE:** 3 Places



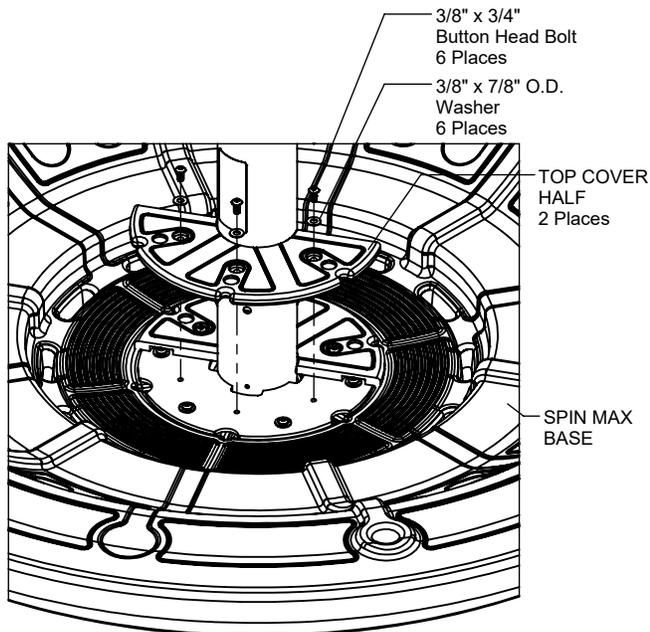
**FIGURE 4**

## Step 5 (Factory Assembled)

Insert Center Post through Spin Max Base and attach to Spin Max Bearing House as shown in Figure 5. (See Note A)



**FIGURE 5**



**FIGURE 6**

## Step 6 (Factory Assembled)

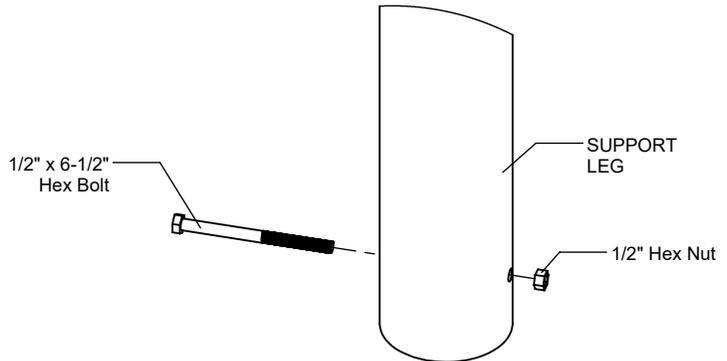
Attach Top Cover Halves to Spin Max Base as shown in Figure 6. (See Note A)

## Step 7

Install footing pin into Post Support as shown in Figure 7. (See Note A)

## Step 8

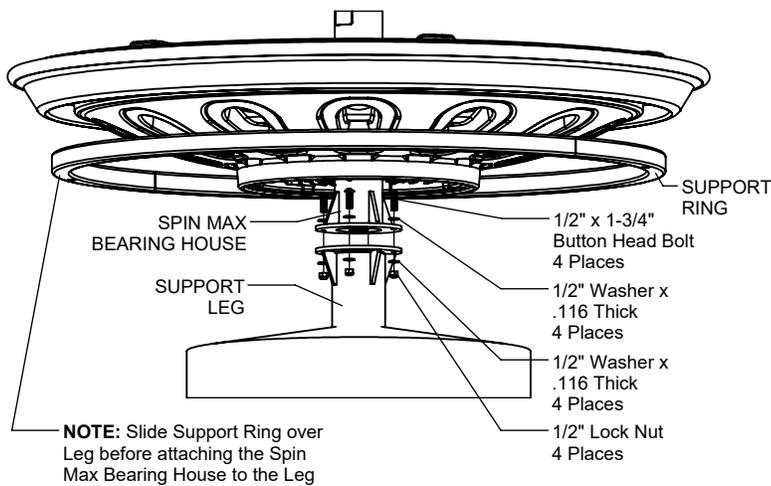
Plumb and level entire component. Pour concrete into footing hole. Allow at least 72 hours to cure before proceeding to the next step. (See Note B)



**FIGURE 7**

## Step 9

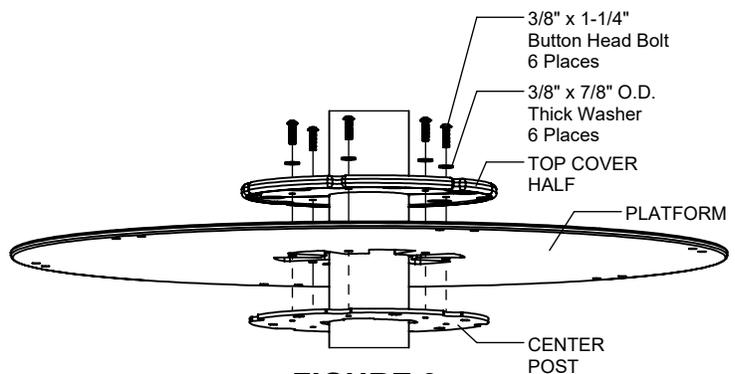
Attach Spin Max Bearing House to Leg as shown in Figure 8. (See Note A).



**FIGURE 8**

## Step 10

Attach Platform and Top Cover Halves to Center Post as shown in Figure 9. (See Note A)

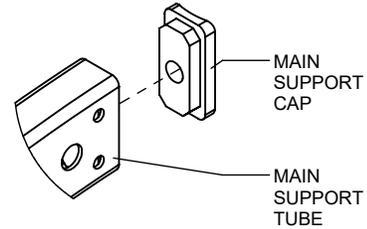


**FIGURE 9**

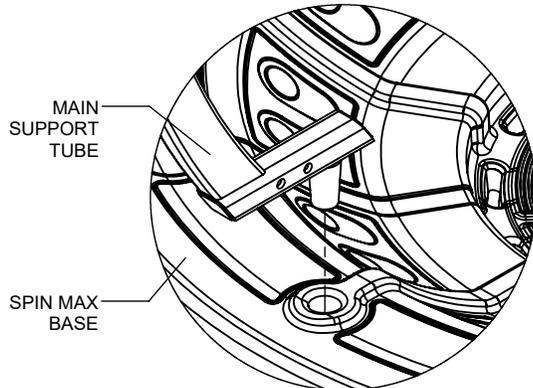
## Step 11

Insert Main Support Caps into each Main Support Tube as shown in Figure 10.

**NOTE:** 6 Places



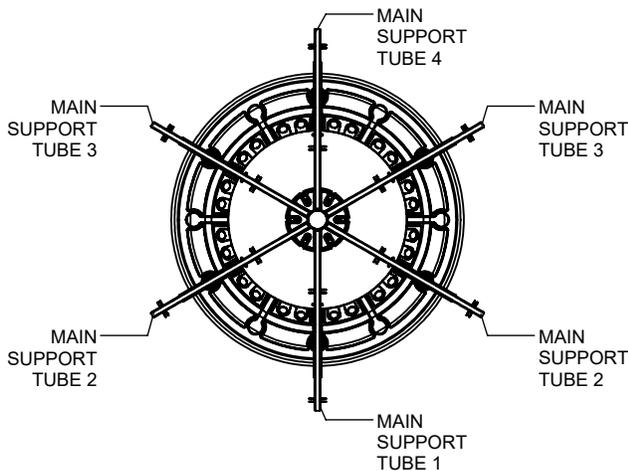
**FIGURE 10**



**FIGURE 11**

## Step 12

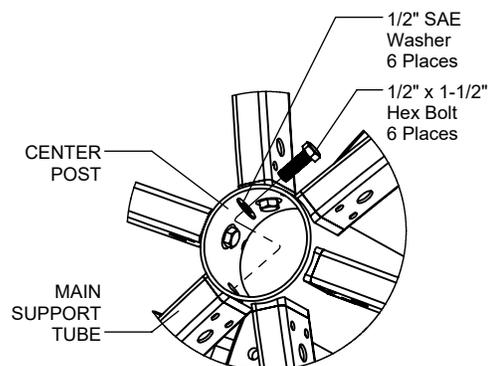
Insert each Main Support Tube into the Spin Max Base as shown in Figure 11. Refer to Figure 12 for the relative location of each Main Support Tube.



**FIGURE 12**

## Step 13

Attach each Main Support Tube to Center Post as shown in Figure 13. (See Note A)

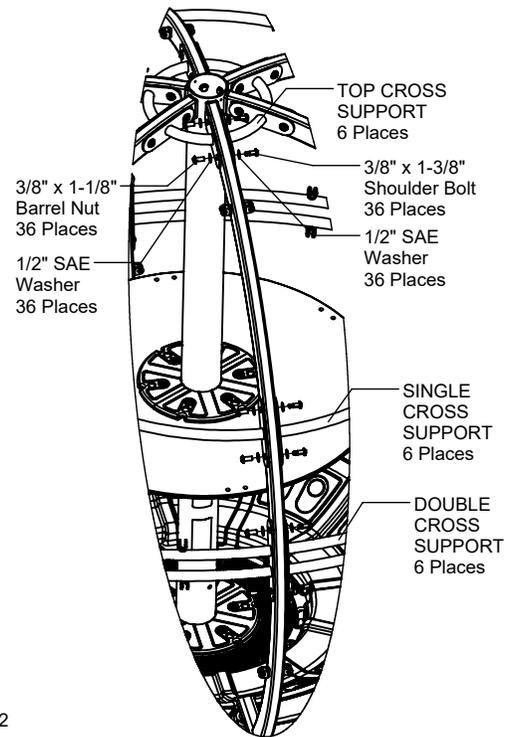


**FIGURE 13**

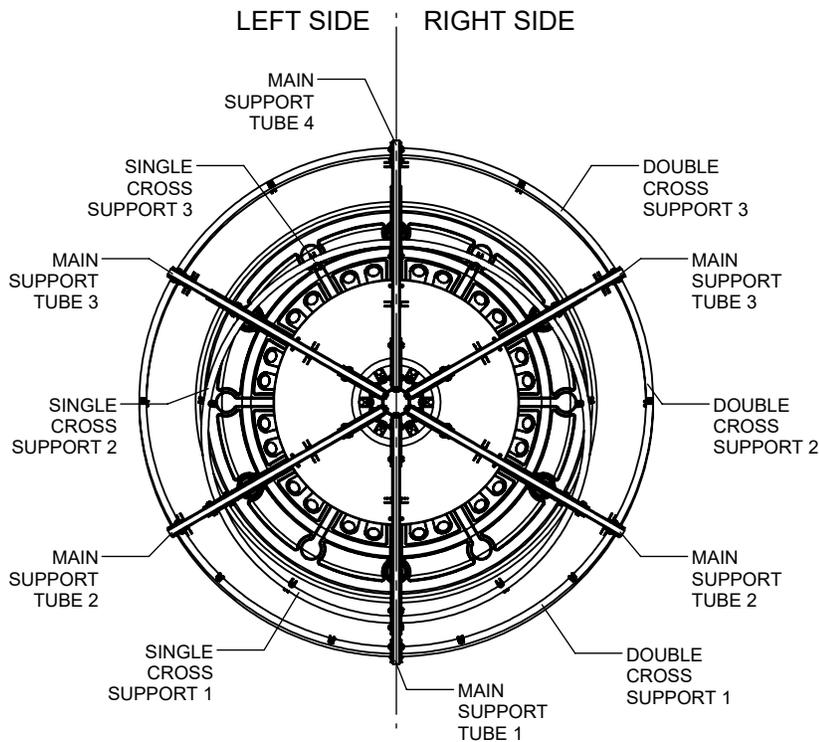
# Step 14

Attach each Top Cross Support, Single Cross Support, and Double Cross Support as shown in Figure 14. (See Note A)

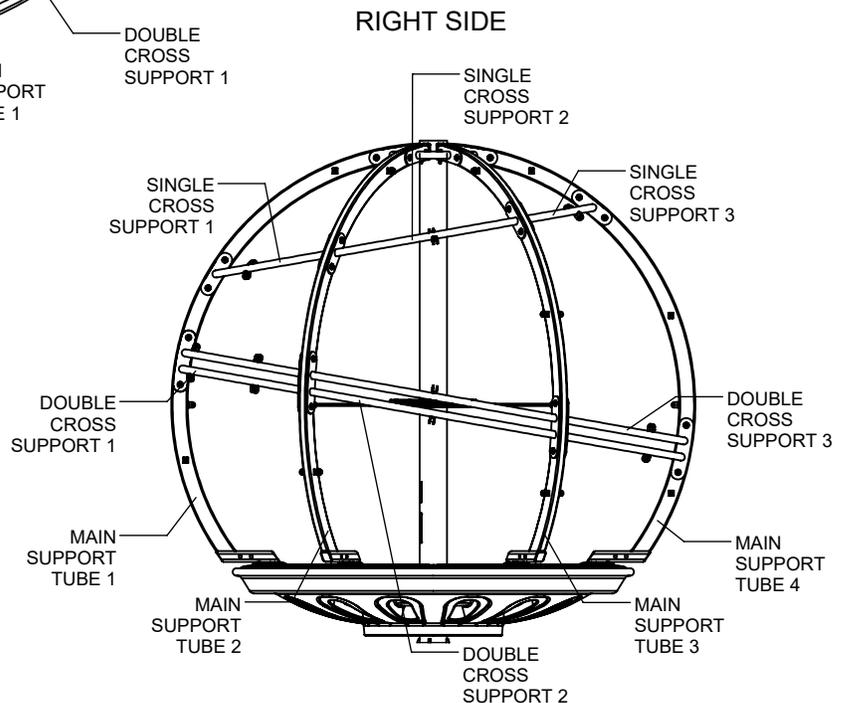
Refer to Figures 15 and 16 for relative locations of each Single and Double Cross Support. Each attachment point is marked with a capital letter (A, B, C, or D) to aid in locating each member.



**FIGURE 14**



**FIGURE 15**

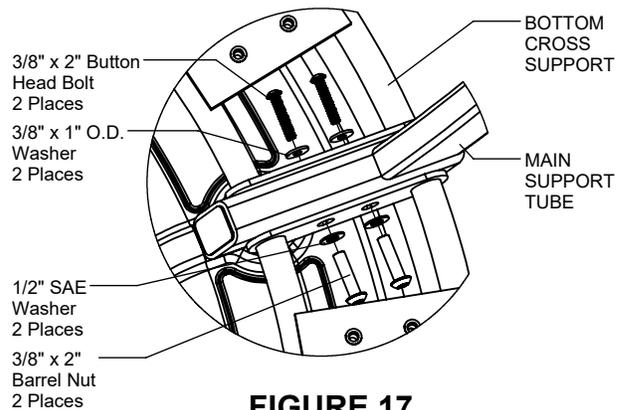


**FIGURE 16**

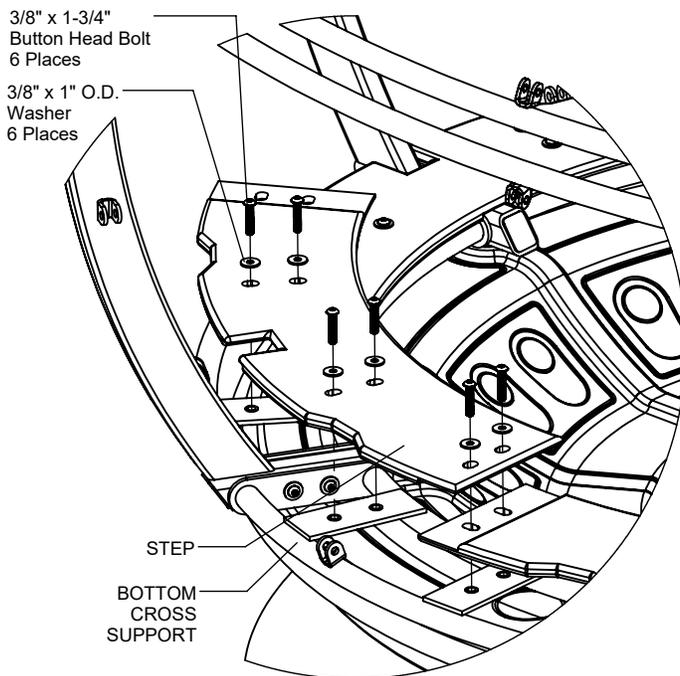
## Step 15

Attach Bottom Cross Supports to Main Support Tubes as shown in Figure 17. (See Note A)

**NOTE:** 6 Places



**FIGURE 17**



**FIGURE 18**

## Step 16

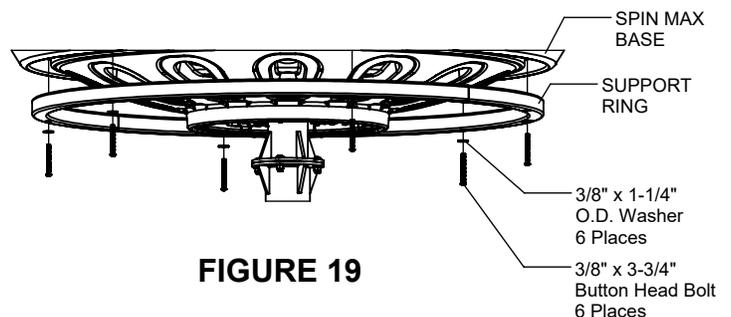
Attach Steps to Bottom Cross Supports as shown in Figure 18. (See Note A)

**NOTE:** The steps overlap on each edge.

**NOTE:** 6 Places

## Step 17

Attach Support Ring to Spin Max Base as shown in Figure 19. (See Note A)

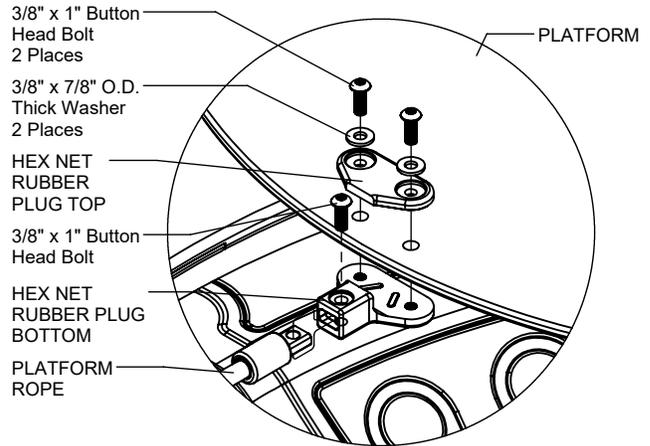


**FIGURE 19**

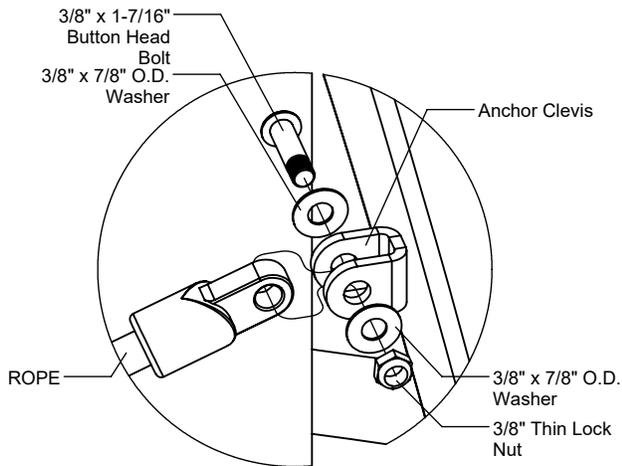
## Step 18

Attach Platform Ropes to Platform as shown in Figure 20. (See Note A)

**NOTE:** 6 Places



**FIGURE 20**



**FIGURE 21**

## Step 19

Attach each Rope to its corresponding Anchor Clevis as shown in Figure 21. (See Note A)

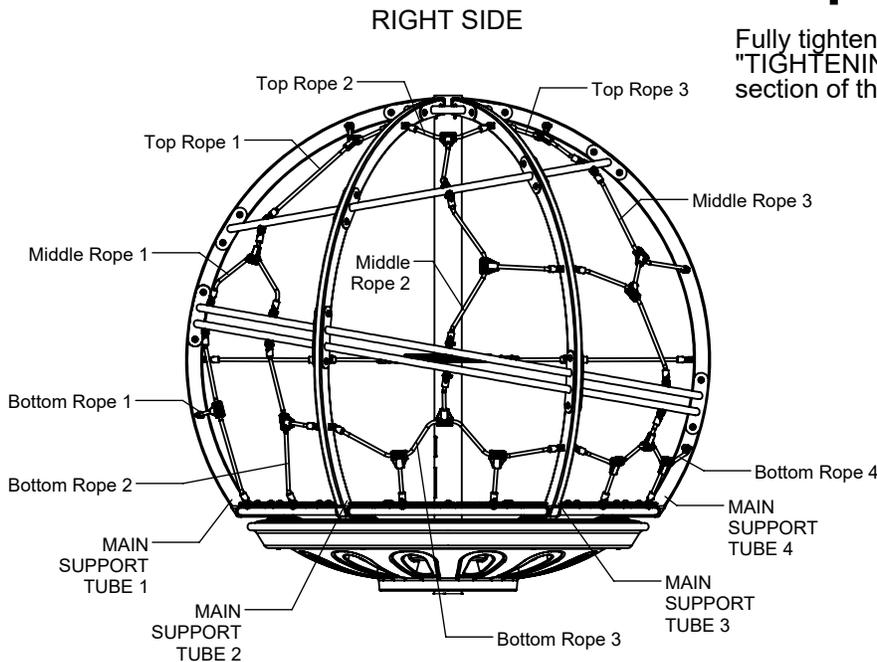
Refer to Figure 22 for relative rope locations.

**NOTE:** Orient hardware so that the free end of the bolt is below the horizontal.

**NOTE:** 76 Places

## Step 20

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



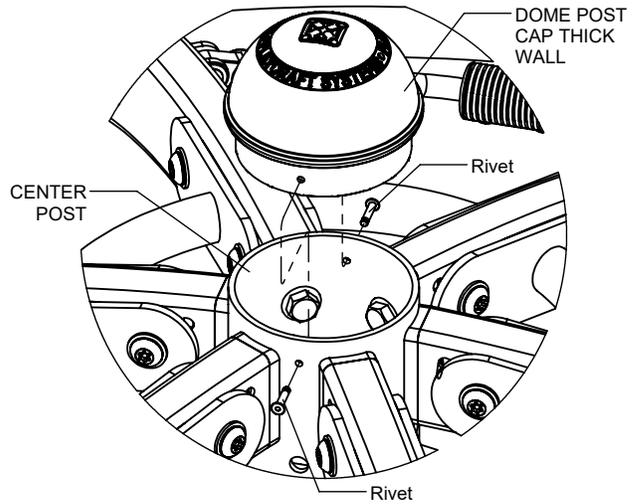
**FIGURE 22**

## Step 21

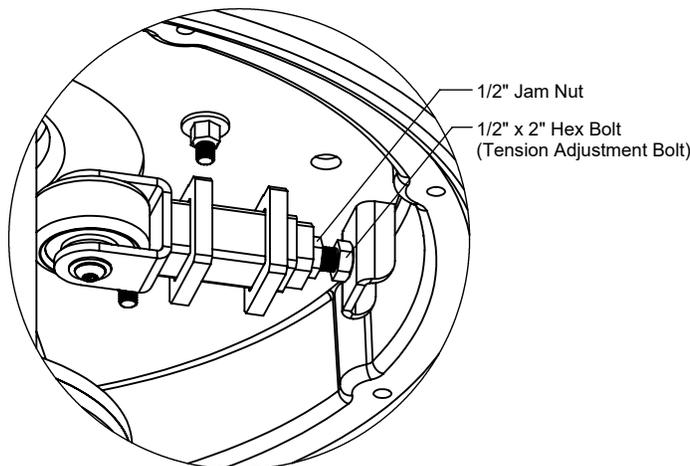
Attach Dome Post Cap to Center Post as shown in Figure 23.

## Step 22

Affix "Top of Surfacing" label to base of Spin-Max Orbit indicating the top of minimum required surfacing depth. (See Note D)



**FIGURE 23**



**FIGURE 24**

## Step 23

To set brake tension, remove Cover Panel Halves, loosen 1/2" Jam Nuts and adjust all Tension Adjustment Bolts by 1/4 turn as shown in Figure 24. Test number of revolutions per minute. Tighten or loosen bolts evenly using 1/4 turn increments. Tighten 1/2" Jam Nuts when brake tension is properly set. (See Note C)

**NOTE:** Do not over tighten Tension Adjustment Bolts.

If any questions or concerns arise during the installation or maintenance of the Spin Max brake, please contact the factory and ask to speak to a customer service representative at **1-800-333-8519**.

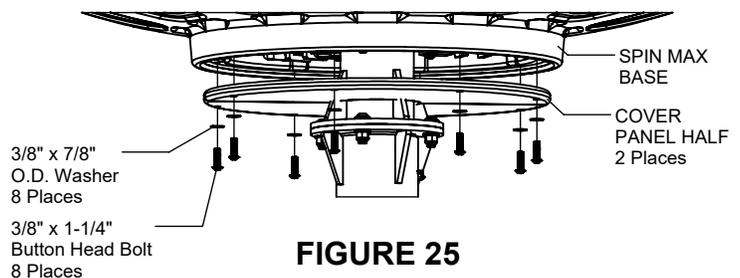
## Step 24

Attach Cover Panel Halves to Spin Max Base as shown in Figure 25.

**NOTE:** Do not use liquid thread lock (such as Loctite®) on the 1/2" Jam Nuts and 1/2" x 2" Hex Bolts.

## Step 25

Place required protective surfacing under and around Spin-Max Orbit. (See Note D)



**FIGURE 25**

# SPIN-MAX ORBIT INSTALLATION INSTRUCTIONS

**PC-2472**  
Page 12 of 13

## Parts List

Part #	DESCRIPTION	QTY
EE-0220	Spin Max Cover Panel Half	2
EE-0226	Spin Max Top Cover	2
EE-0641	Spin-Max Orbit Main Support Cap	6
EE-0642	Spin-Max Orbit Step	6
FS-PC2472-DB1	Spin-Max Orbit Angled Double Bar Cross Support 1	2
FS-PC2472-DB2	Spin-Max Orbit Angled Double Bar Cross Support 2	2
FS-PC2472-DB3	Spin-Max Orbit Angled Double Bar Cross Support 3	2
FS-PC2472-LEG	Spin Max Orbit Leg	1
FS-PC2472-MS1	Spin-Max Orbit Main Support Tube 1	1
FS-PC2472-MS2	Spin-Max Orbit Main Support Tube 2	2
FS-PC2472-MS3	Spin-Max Orbit Main Support Tube 3	2
FS-PC2472-MS4	Spin-Max Orbit Main Support Tube 4	1
FS-PC2472-SB1	Spin-Max Orbit Angled Single Bar Cross Support 1	2
FS-PC2472-SB2	Spin-Max Orbit Angled Single Bar Cross Support 2	2
FS-PC2472-SB3	Spin-Max Orbit Angled Single Bar Cross Support 3	2
FS-PC2472-TCS	Spin-Max Orbit Top Cross Support	6
FS-PC2476-RNG	Spin Max Support Ring	1
GF-7002-TW	Post Cap R5 Dome - Thick Wall	1
HE-0122	Spin-Max Orbit Platform	1
HE-0123-B1	Spin-Max Orbit Bottom Rope 1	2
HE-0123-B2	Spin-Max Orbit Bottom Rope 2	2
HE-0123-B3	Spin-Max Orbit Bottom Rope 3	2
HE-0123-B4	Spin-Max Orbit Bottom Rope 4	2
HE-0123-M1	Spin-Max Orbit Middle Rope 1	2
HE-0123-M2	Spin-Max Orbit Middle Rope 2	2
HE-0123-M3	Spin-Max Orbit Middle Rope 3	2
HE-0123-PLT	Spin-Max Orbit Platform Rope	6
HE-0123-T1	Spin-Max Orbit Top Rope 1	2
HE-0123-T2	Spin-Max Orbit Top Rope 2	2
HE-0123-T3	Spin-Max Orbit Top Rope 3	2
IE-0084-B	Hex Net Rubber Plug Bottom	6
IE-0084-T	Hex Net Rubber Plug Top	6
372017	Top of Surfacing Label	1
9103052-TR	Bolt Button Head 3/8" x 1"	18
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	14
9103082-TR	Bolt Button Head 3/8" x 1-3/4"	36
9103092-TR	Bolt Button Head 3/8" x 2"	12
9103162-TR	Bolt Button Head 3/8" x 3-3/4"	6
9103200-TR	Bolt Button Head 3/8" x 1-7/16"	76
9105082	Bolt Button Head 1/2" x 1-3/4"	4
9125072	Bolt Hex 1/2" x 1-1/2"	6
9125272	Bolt Hex 1/2 x 6-1/2	1
9143062-TR	Bolt Shoulder 3/8" x 1-3/8" BH	36
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	48
9333042	Washer Flat 3/8" x 7/8" O.D.	160
9333062	Washer Flat 3/8" x 1-1/4" x .125	6
9335002	Washer Flat 1/2" (.116" thick)	8
9339042	Washer Flat 3/8" x 7/8" O.D. x .100" Thick	18

## Parts List Continued

Part #	DESCRIPTION	QTY
9345002	Washer Flat SAE 1/2"	90
9415132	Nut Lock 1/2"	4
9423002	Nut Lock Thin 3/8"	76
9443052-TR	Nut Barrel 3/8" x 1-1/8" BH	36
9443092-TR	Nut Barrel 3/8" x 2" BH	12
9485001	1/2" Hex Nut	1
9610012	Rivet 3/16" x 1/2" to 3/4" Pop	2

## Assembled Parts List

Part #	DESCRIPTION	QTY
DE-0044	Spin Max Base	1
EE-0226	Spin Max Top Cover	2
FS-PC2472-BCS	Spin-Max Orbit Bottom Cross Support	6
FS-PC2472-CP	Spin-Max Orbit Center Post	1
FS-PC2476-BHS	Spin Max Bearing House	1
FS-PC2476-LTR	Speed Limiter Arm	3
FS-PC2476-SLB	Speed Limiter Base	1
IE-0028	Spin Max Base Spacer	6
321250	2-1/2" Merry-go-Round Wheel	3
372016	Warning Label	1
372026	Spin-Max Orbit Warning Label	1
455111	Nutsert 3/8 x .805	36
480320	External Snap Ring	1
481631	Double Seal Ball Bearing	2
9103032-TR	Bolt Button Head 3/8" x 3/4"	6
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	3
9103142-TR	Bolt Button Head 3/8" x 3-1/4"	6
9125092-TAP	Bolt Hex 1/2" x 2" Full Thread	3
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	12
9333042	Washer Flat 3/8" x 7/8" O.D.	12
9413002	Nut Lock 3/8"	6
9423002	Nut Lock Thin 3/8"	3
9485132-JAM	Jam Nut 1/2" Zinc	3



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800.333.8519 (U.S.A.) or 541.955.9199 (International)

**Rev D**  
1/11/2022

## Specifications

### **SPIN MAX COVER HALVES, SUPPORT CAP, & STEPS:**

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

### **SPIN MAX BASE:**

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

### **SPIN-MAX ORBIT CROSS SUPPORTS:**

Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 1/4" tabs and clevises and will have a multi-stage baked-on powder coat finish.

### **SPIN-MAX ORBIT MAIN SUPPORT TUBES:**

Shall be fabricated using 1.5" x 3" 11 gauge rectangular steel tubing with welded 2" x 2" x 1/4" thick square steel tubing and welded 1/4" thick steel clevises, 1/4" thick steel plate, 12 gauge steel caps, and steel plug and will have a multi-stage baked-on powder coat finish.

### **SPIN MAX SUPPORT RING:**

Shall be fabricated using 2" square 11 gauge steel outer ring with welded 3/8" thick steel splice bars and will have a multi-stage baked-on powder coat finish.

### **SPIN MAX ORBIT SUPPORT LEG:**

Shall be fabricated using 5" schedule 80 pipe with welded 3/8" thick steel mounting plate and gussets and will have a multi-stage baked-on powder coat finish.

### **POST CAP R5 DOME:**

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

### **SPIN-MAX ORBIT PLATFORM:**

Shall be constructed of UV-stabilized flexible rubber compound with slash proof, reinforced metal inserts.

## Specifications Continued

### **SPIN-MAX ORBIT ROPES:**

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

### **HEX NET RUBBER PLUG TOP & BOTTOM:**

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

### **SPIN-MAX ORBIT CENTER POST:**

Shall be fabricated using 5" O.D. 7 gauge steel tubing with welded 1/4" plates and plug, 3/8" thick steel plates, and machined steel spindle and will have a multi-stage baked-on powder coat finish.

### **SPIN MAX BEARING HOUSE:**

Shall be machined using 5" O.D. 1/2" wall with welded 3/8" thick steel mounting plate and will have a multi-stage baked-on powder coat finish.

### **SPEED LIMITER ARM:**

Shall be fabricated using 1-1/4" square 16 gauge steel tubing with welded 3/8" thick steel plug and 3/16" thick steel clevis and will have a multi-stage baked-on powder coat finish.

### **SPEED LIMITER BASE:**

Shall be fabricated using 1/4" thick steel plate with welded 3/16" thick steel tabs and 3/8" thick steel ring blocks and will have a multi-stage baked-on powder coat finish.

### **SPIN MAX BASE SPACER:**

Shall be machined from high strength aluminum.

### **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.

