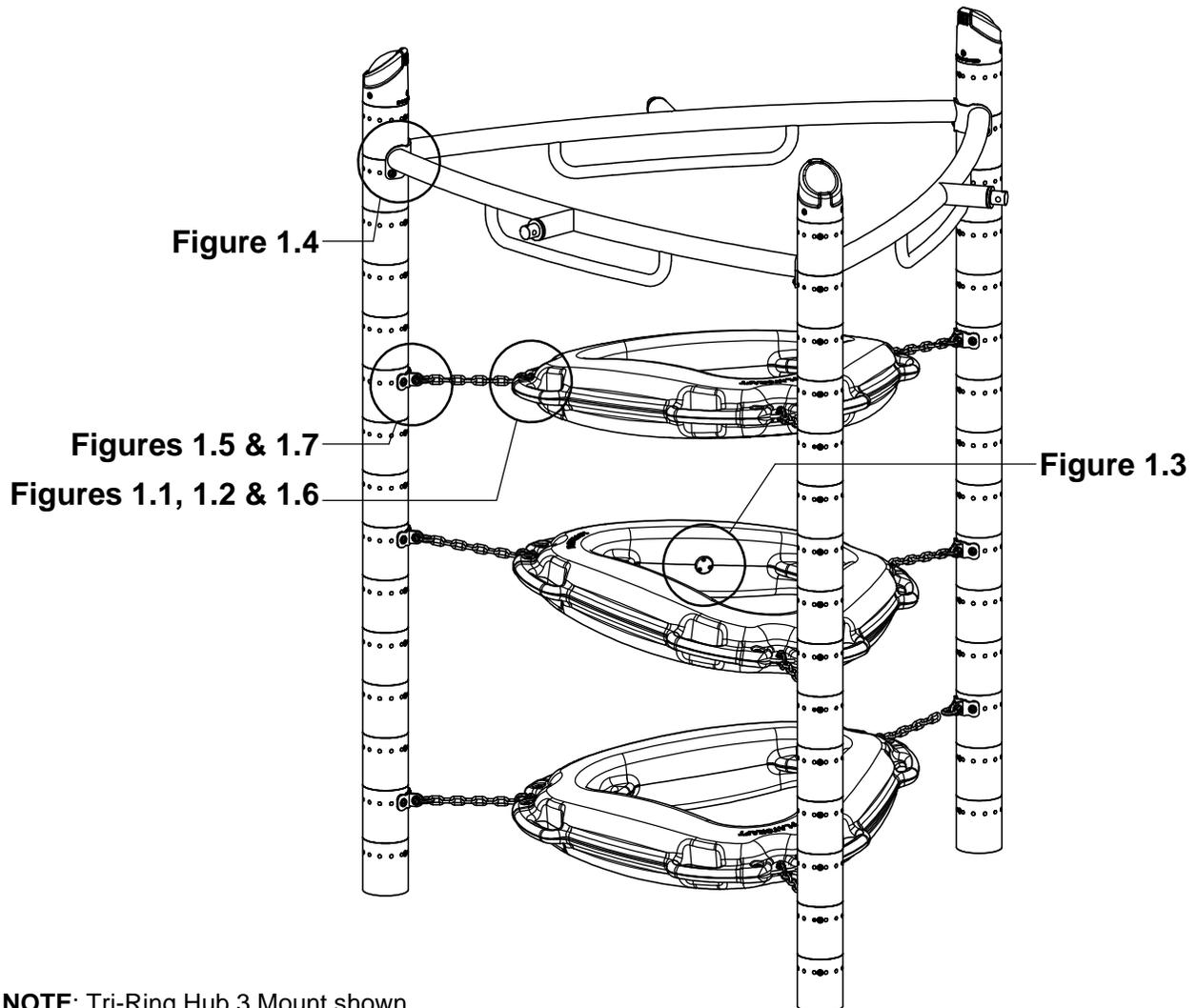


**IMPORTANT NOTES: Read First**

(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) 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  
Tri-Ring Hub**

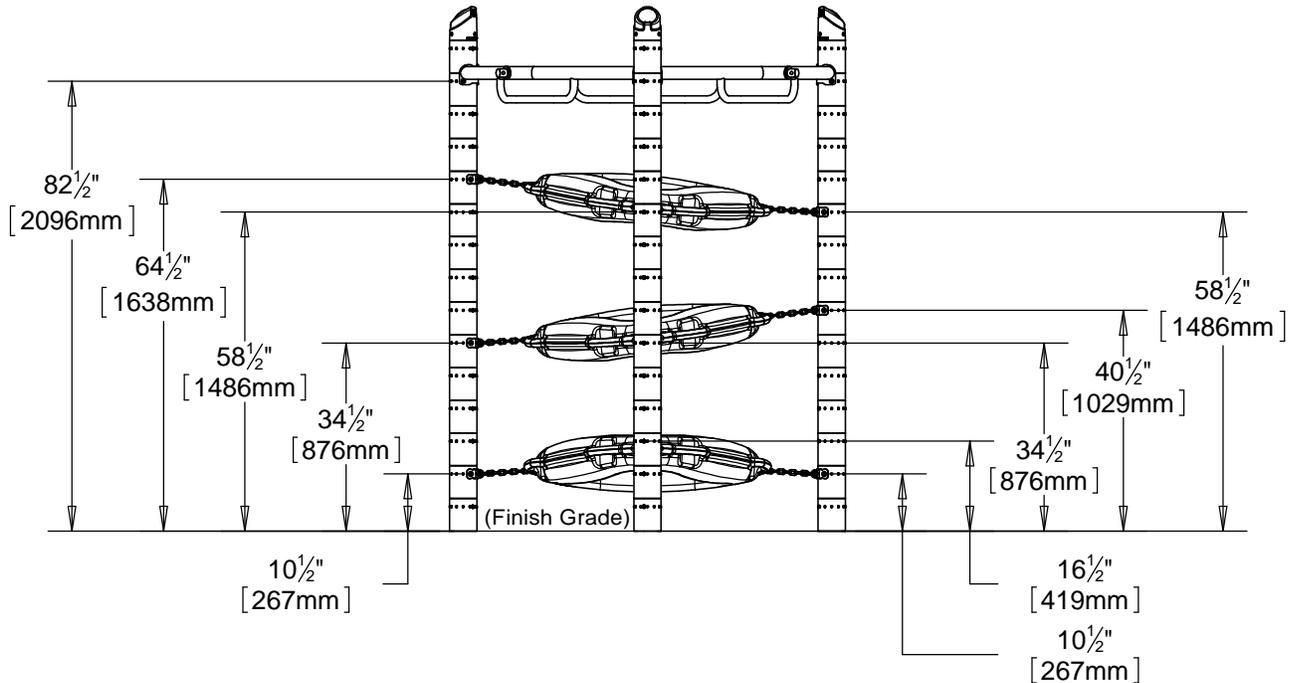


**NOTE:** Tri-Ring Hub 3 Mount shown. Other configurations will vary slightly, but does not affect assembly.

# Step 1

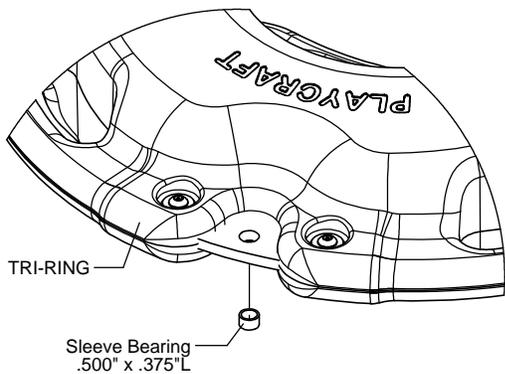
Refer to Elevation View, locate mounting holes and remove required post plugs for assembly. Heights shown from finish grade to mounting hole.

**Elevation View**

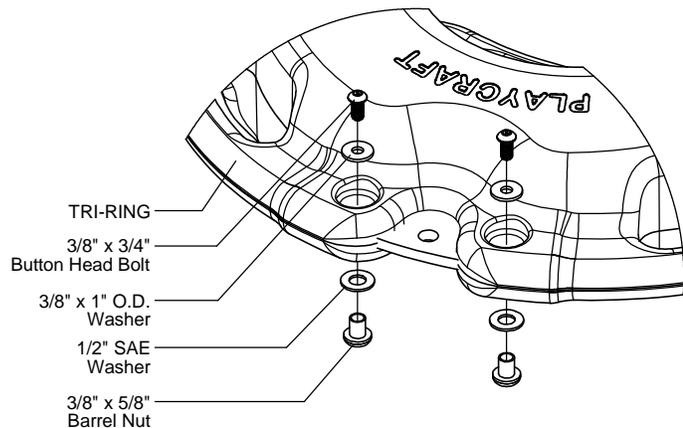


# Step 2 (Factory Assembled)

Attach hardware to Tri-Rings as shown in Figure 1.1. (See Note A)



**Figure 1.2**



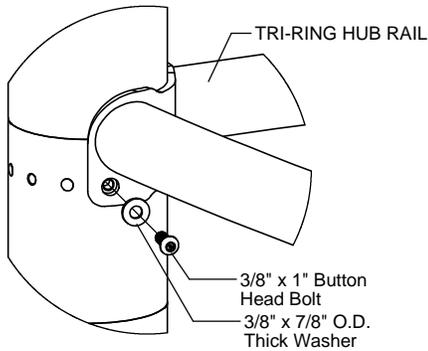
**Figure 1.1**

# Step 3 (Factory Assembled)

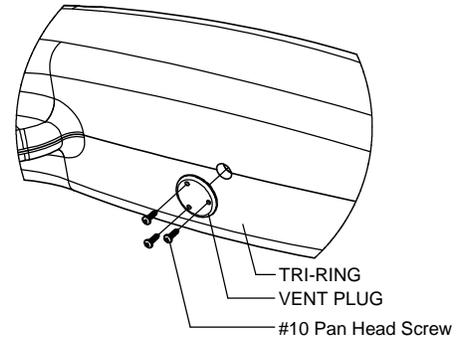
Insert sleeve bearings into Tri-Rings as shown in Figure 1.2.

## Step 4 (Factory Assembled)

Attach Vent Plugs to Tri-Rings as shown in Figure 1.3.



**Figure 1.4**



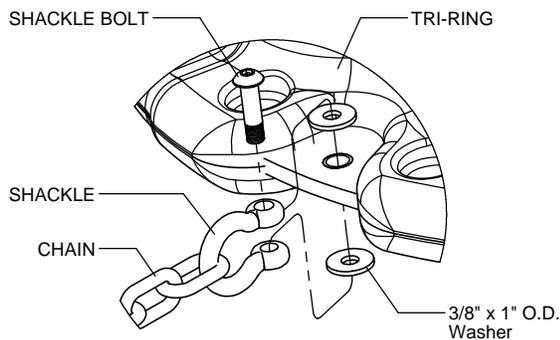
**Figure 1.3**

## Step 5

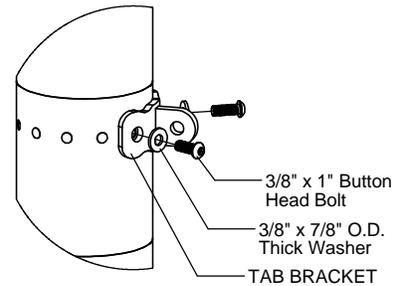
Refer to Elevation View and attach Tri-Ring Hub Rail to Posts as shown in Figure 1.4. (See Note A)

## Step 6

Refer to Elevation View and attach Post Tab Brackets to Posts as shown in Figure 1.5. (See Note A)



**Figure 1.6**



**Figure 1.5**

## Step 7

Attach Chains to Tri-Rings as shown in Figure 1.6. (See Note A)

## Step 8

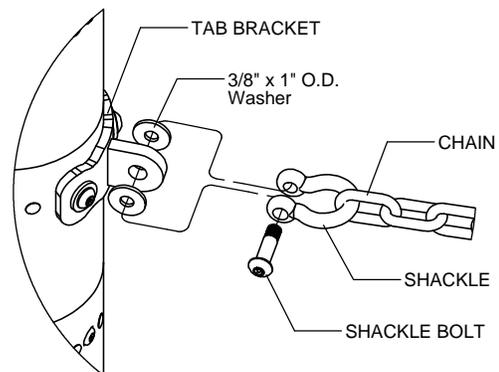
Attach Chains to Post Tab Brackets as shown in Figure 1.7. (See Note A)

## Step 9

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

## Step 10

Place required protective surfacing under and around Tri-Ring Hub. (See Note B)



**Figure 1.7**

# TRI-RING HUB RV INSTALLATION INSTRUCTIONS

**RV-1959**  
Page 4 of 4

## Parts List

S-1959-RV		
Part #	DESCRIPTION	QTY.
FS-1510-RV-T	Post Tab Bracket RV	9
FS-1959-RV	Tri-Ring Hub Rail RV	1
HE-0015	8-Link Galvanized Chain	9
4-9339042	Washer Flat 3/8" x 7/8" O.D. x .100" Thick	24
451161-SS	Swing Shackle - Stainless Steel	18
9103052-TR	Bolt Button Head 3/8" x 1"	24
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	36

S-1959-1RV		
Part #	DESCRIPTION	QTY.
FS-1510-RV-T	Post Tab Bracket RV	9
FS-1959-1RV	Tri-Ring Hub Rail 1 Mount RV	1
HE-0015	8-Link Galvanized Chain	9
4-9339042	Washer Flat 3/8" x 7/8" O.D. x .100" Thick	24
451161-SS	Swing Shackle - Stainless Steel	18
9103052-TR	Bolt Button Head 3/8" x 1"	24
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	36

S-1959-2RV		
Part #	DESCRIPTION	QTY.
FS-1510-RV-T	Post Tab Bracket RV	9
FS-1959-2RV	Tri-Ring Hub Rail 2 Mount RV	1
HE-0015	8-Link Galvanized Chain	9
4-9339042	Washer Flat 3/8" x 7/8" O.D. x .100" Thick	24
451161-SS	Swing Shackle - Stainless Steel	18
9103052-TR	Bolt Button Head 3/8" x 1"	24
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	36

S-1959-3RV		
Part #	DESCRIPTION	QTY.
FS-1510-RV-T	Post Tab Bracket RV	9
FS-1959-3RV	Tri-Ring Hub Rail 3 Mount RV	1
HE-0015	8-Link Galvanized Chain	9
4-9339042	Washer Flat 3/8" x 7/8" O.D. x .100" Thick	24
451161-SS	Swing Shackle - Stainless Steel	18
9103052-TR	Bolt Button Head 3/8" x 1"	24
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	36

## Assembled Parts List

Part #	DESCRIPTION	QTY.
DE-0004	Tri-Ring	3
EE-4867	Geo-Wave Vent Plug	3
562050	Sleeve Bearing .500" x .375"L	9
9103032-TR	Bolt Button Head 3/8" x 3/4"	18
9251032	Screw SQ #10x3/4 DR PH SMS SS	9
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	18
9345002	Washer Flat SAE 1/2"	18
9443022-TR	Nut Barrel 3/8" x 5/8" BH	18

## Specifications

### TRI-RING HUB RAIL RV:

Shall be fabricated using 2.375" O.D. 11 gauge steel tubing with welded 1.315" O.D. 12 gauge hand rails and 1/4" thick stainless steel mounting brackets. The Tri-Ring Hub Rail RV shall have a multi-stage baked-on powder coat finish.

### TRI-RING HUB RAIL WITH MOUNTS RV:

Shall be fabricated using 2.375" O.D. 11 gauge steel tubing with welded 1.315" O.D. 12 gauge hand rails, 1/4" thick stainless steel mounting brackets, and stainless steel pins. The Tri-Ring Hub Rail with Mounts RV shall have a multi-stage baked-on powder coat finish.

### POST TAB BRACKET RV:

Shall be fabricated from 1/4" thick stainless steel mounting bracket with welded 3/8" thick steel tab. The Post Tab Bracket RV shall have a multi-stage baked-on powder coat finish.

### TRI-RING:

Shall be constructed of UV-stabilized, rotationally molded, linear, low density polyethylene with an average wall thickness of .250", and .375" thick molded in aluminum mounting plates.

### 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.



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

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

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