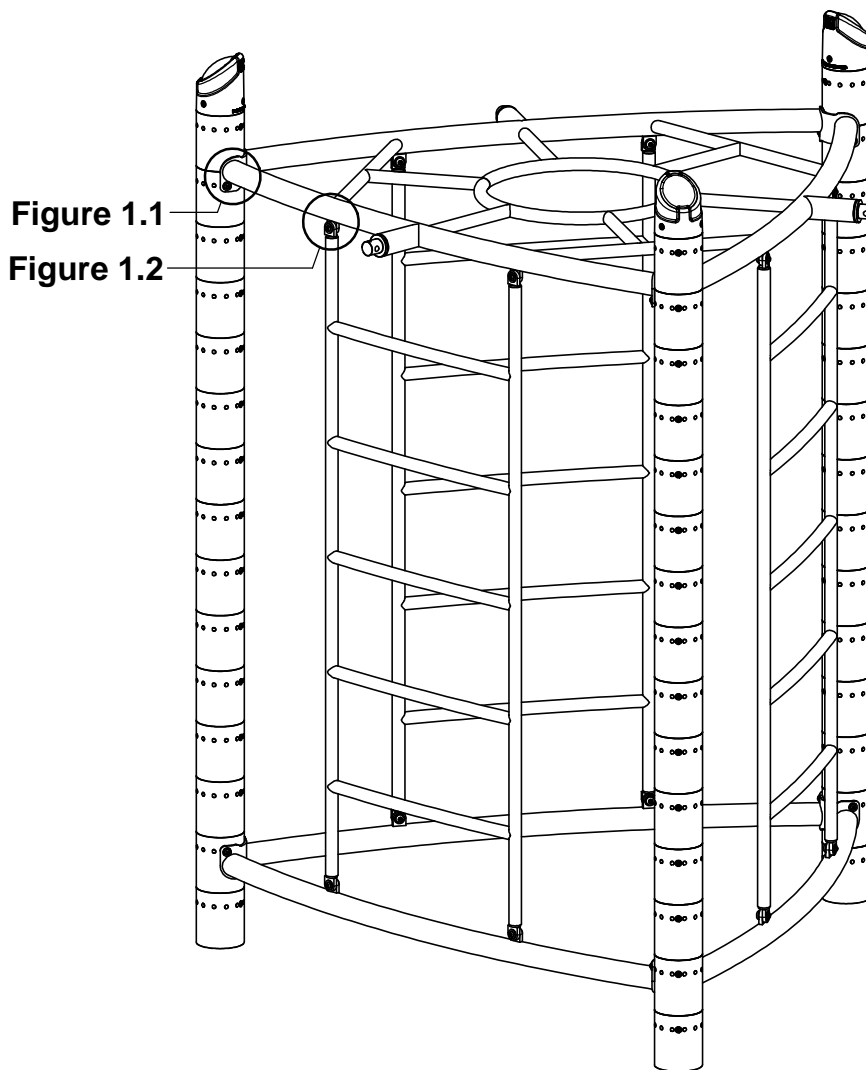


IMPORTANT NOTES: Read First

(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 for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

FIGURE 1
Astro Hub



NOTE: Astro 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.

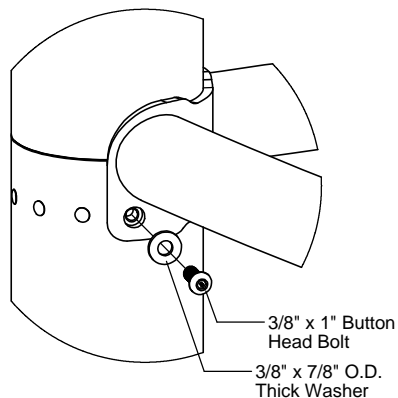
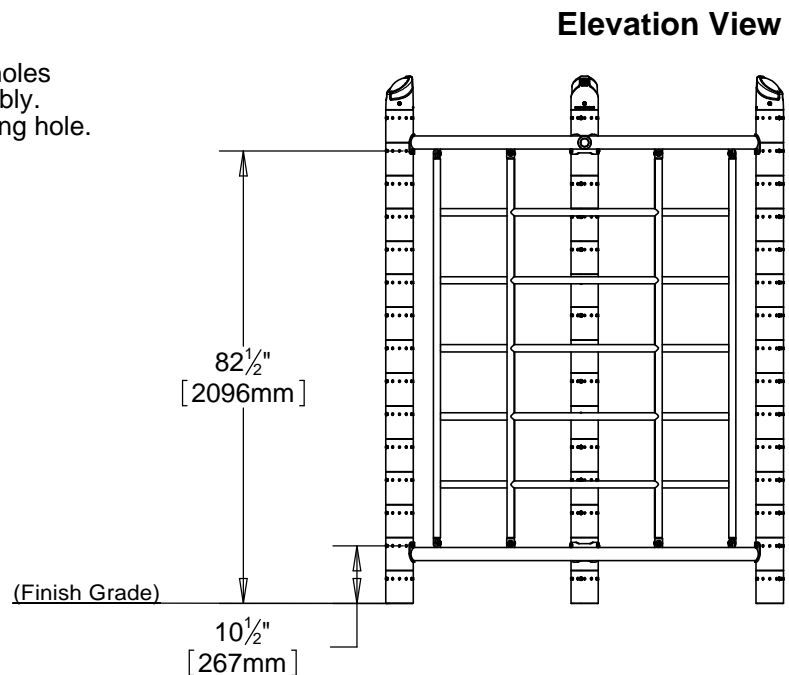


Figure 1.1

Step 2

Refer to Elevation View and attach Astro Hub Top and Bottom Rails as shown in Figure 1.1. (See Note A)

Step 3

Attach Ladders to Astro Hub Rails as shown in Figure 1.2. (See Note A)

Step 4

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

Step 5

Place required protective surfacing under and around Astro Hub. (See Note B)

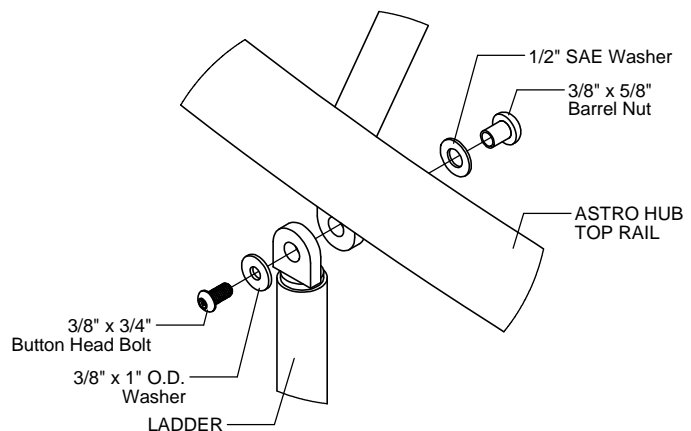


Figure 1.2

ASTRO HUB RV INSTALLATION INSTRUCTIONS

RV-1955
Page 3 of 3

Parts List

| S-1955-RV | | |
|-------------|--|-----|
| Part # | DESCRIPTION | QTY |
| FS-1955-BRV | Astro Hub Bottom Rail RV | 1 |
| FS-1955-L | Tri Steel Net Climber Ladder | 3 |
| FS-1955-TRV | Astro Hub Top Rail RV | 1 |
| 4-9339042 | Washer Flat 3/8" x 7/8" O.D. x .100" Thick | 12 |
| 9103032-TR | Bolt Button Head 3/8" x 3/4" | 12 |
| 9103052-TR | Bolt Button Head 3/8" x 1" | 12 |
| 9333002 | Washer Flat 3/8" x 1" O.D. x .100" thick | 12 |
| 9345002 | Washer Flat SAE 1/2" | 12 |
| 9443022-TR | Nut Barrel 3/8" x 5/8" BH | 12 |

| S-1955-1RV | | |
|--------------|--|-----|
| Part # | DESCRIPTION | QTY |
| FS-1955-BRV | Astro Hub Bottom Rail RV | 1 |
| FS-1955-L | Tri Steel Net Climber Ladder | 3 |
| FS-1955-T1RV | Astro Hub Top Rail 1 Mount RV | 1 |
| 4-9339042 | Washer Flat 3/8" x 7/8" O.D. x .100" Thick | 12 |
| 9103032-TR | Bolt Button Head 3/8" x 3/4" | 12 |
| 9103052-TR | Bolt Button Head 3/8" x 1" | 12 |
| 9333002 | Washer Flat 3/8" x 1" O.D. x .100" thick | 12 |
| 9345002 | Washer Flat SAE 1/2" | 12 |
| 9443022-TR | Nut Barrel 3/8" x 5/8" BH | 12 |

| S-1955-2RV | | |
|--------------|--|-----|
| Part # | DESCRIPTION | QTY |
| FS-1955-BRV | Astro Hub Bottom Rail RV | 1 |
| FS-1955-L | Tri Steel Net Climber Ladder | 3 |
| FS-1955-T2RV | Astro Hub Top Rail 2 Mount RV | 1 |
| 4-9339042 | Washer Flat 3/8" x 7/8" O.D. x .100" Thick | 12 |
| 9103032-TR | Bolt Button Head 3/8" x 3/4" | 12 |
| 9103052-TR | Bolt Button Head 3/8" x 1" | 12 |
| 9333002 | Washer Flat 3/8" x 1" O.D. x .100" thick | 12 |
| 9345002 | Washer Flat SAE 1/2" | 12 |
| 9443022-TR | Nut Barrel 3/8" x 5/8" BH | 12 |

| S-1955-3RV | | |
|--------------|--|-----|
| Part # | DESCRIPTION | QTY |
| FS-1955-BRV | Astro Hub Bottom Rail RV | 1 |
| FS-1955-L | Tri Steel Net Climber Ladder | 3 |
| FS-1955-T3RV | Astro Hub Top Rail 3 Mount RV | 1 |
| 4-9339042 | Washer Flat 3/8" x 7/8" O.D. x .100" Thick | 12 |
| 9103032-TR | Bolt Button Head 3/8" x 3/4" | 12 |
| 9103052-TR | Bolt Button Head 3/8" x 1" | 12 |
| 9333002 | Washer Flat 3/8" x 1" O.D. x .100" thick | 12 |
| 9345002 | Washer Flat SAE 1/2" | 12 |
| 9443022-TR | Nut Barrel 3/8" x 5/8" BH | 12 |

Specifications

ASTRO HUB BOTTOM RAIL RV:

Shall be fabricated using 2.375" O.D. 11 gauge steel tubing with welded 1/4" thick stainless steel mounting brackets and 3/8" thick steel tabs. The Astro Hub Bottom Rail RV shall have a multi-stage baked-on powder coat finish.

ASTRO HUB TOP RAIL RV:

Shall be fabricated using 2.375" O.D. 11 gauge steel tubing with welded 1/4" thick stainless steel mounting brackets and 3/8" thick steel tabs. The Astro Hub Top Rail RV shall have a multi-stage baked-on powder coat finish.

ASTRO HUB TOP RAIL WITH MOUNTS RV:

Shall be fabricated using 2.375" O.D. 11 gauge steel tubing with welded 1/4" thick stainless steel mounting brackets, 3/8" thick steel tabs, and stainless steel pins. The Astro Hub Top Rail with Mounts RV shall have a multi-stage baked-on powder coat finish.

TRI STEEL NET CLIMBER LADDER:

Shall be fabricated using 1.315" O.D. 12 gauge steel tubing with welded 3/8" thick steel tabs. The Tri Steel Net Climber Ladder shall have a multi-stage baked-on powder coat finish.

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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