

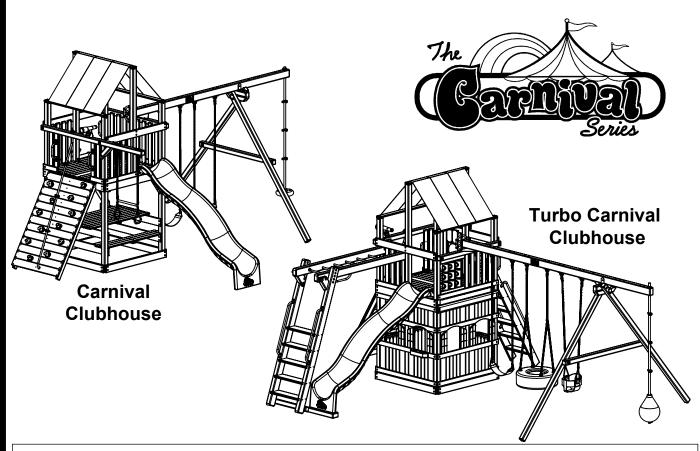
PLAY SYSTEMS, INC.®
FINE RESIDENTIAL PLAY EQUIPMENT

### **Carnival Clubhouse**

Assembly Instructions 5-70-0424

(Rev 1 -3/7/17)

Contains Assembly, Use, and Maintenance Instructions



MARNING: Not suitable for children under 36 months. Fall Hazard. Only for domestic use.

To be used under the direct supervision of an adult. Intended for children ages 3-12.

This owner's manual contains important information about how to assemble, locate, use, and maintain this playground equipment. Read this manual before you start assembly. Follow all instructions. Be sure to educate all children who use this playground and all adult supervisors about the rules for safe use that are contained in this manual.

Keep this Owner's Manual for future reference and to remind you of how to safely use and maintain this equipment.

RAINBOW RESERVES THE RIGHT TO MAKE CHANGES AND MODIFICATIONS TO THIS PRODUCT.

## **OWNER'S MANUAL**

### Rainbow Play Systems, Inc.

Thank you for choosing Rainbow Play Systems, Inc. Please read the instruction manual thoroughly before you start building your Carnival Clubhouse to help ensure safe installation. Familiarize yourself with all hardware and parts to help with building your playground.

WARNING: Failure to follow the assembly, location, use, and maintenance instructions in this manual could result in serious injury to children using this playground.

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Thoroughly read all Safety Instructions on pages 2-5 before beginning assembly of your playset.

## Welcome to RAINBOW

Welcome to our family of ready-to-build residential play equipment. Ease of assembly has been pre-engineered into our product and we provide step-by-step installation instructions.

To ensure safe play for your children, before building your play system, please take some time with your children and go over the **Rules for safe play on your play system.** Do not allow children in the area while you are assembling your play system. Many of Rainbow's components are very heavy and could seriously injure a child. Observing these rules reduces the likelihood of serious or fatal injury.

After thoroughly reading the information below, locate your play site and carefully unpack parts. As you unpack your play system, keep the parts list handy and become familiar with each part before beginning assembly. Remember that a little extra time spent familiarizing yourself with the parts and the instructions before you begin will help to avoid mistakes and save you time later. Please keep these instructions for future reference.

This product is recommended for children 3 to 12 years of age.

Note: This product is not intended for public use. Rainbow Play Systems, Inc. does not warranty its Residential Play Equipment subject to commercial use.

# Safety Instructions Rules for Safe Play

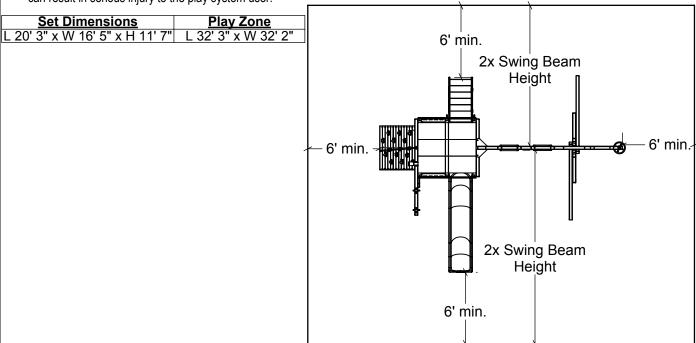
WARNING: Before allowing children to play on this equipment for the first time, carefully review the rules for safe play with them. Observing the following statements and warnings reduces the likelihood of a serious or fatal injury.

- 1. **IT IS RECOMMENDED** that no more than 8-10 children, not exceeding a combined weight of 1,500 pounds, play on the system at one time. This product is recommended for children 3 to 12 years of age.
- 2. CLOSE ADULT SUPERVISION is required for children of all ages.
- 3. WARN CHILDREN TO AVOID playing or walking in front of, behind, or between moving equipment.
- 4. WARN CHILDREN NOT TO twist swing chains or ropes, or to loop them over the top support bar since this may reduce the strength of the chain or rope.
- INSTRUCT CHILDREN NOT TO swing empty seats, trapeze bar, gliders, buoy balls or tire swings.
- 6. INSTRUCT CHILDREN to always sit, never stand or kneel, in the center of the swing seat with their full weight.
- 7. INSTRUCT CHILDREN NOT TO use any part of the play system in a manner other than what it is intended.
- 8. **INSTRUCT CHILDREN NOT TO** get off equipment while it is in motion.
- DRESS CHILDREN APPROPRIATELY. CHILDREN SHOULD NOT wear scarves, hats with straps, helmets, jackets with draw strings, hooded jackets, poorly fitting shoes, or any other loose fitting clothing that is potentially hazardous while using equipment.
- 10. INSTRUCT CHILDREN NOT TO play on the equipment if it is wet. Potentially slippery surfaces may cause a hazard.
- 11. VERIFY all suspended items such as ropes and chains are secure at both ends.
- 12. VERIFY all suspended items such as climbing ropes are tight so they cannot be looped back on themselves.
- 13. **INSTRUCT CHILDREN NOT TO** attach items to the play system not specifically intended for use with the play equipment. Items such as, but not limited to, jump ropes, clotheslines, pet leashes, cables and chain may pose a strangulation hazard.
- 14. **INSTRUCT CHILDREN TO REMOVE** any bike or other sports helmets before playing on the play equipment, as they may pose a possible hanging hazard. Children must be dressed appropriately.
- 15. INSTRUCT CHILDREN there may only be one person on a swing at a time with a maximum weight of 150 pounds per swing.
- 16. VERIFY there are no gaps between the slide bed way and the slide screws.
- 17. INSTRUCT CHILDREN to always go down slides feet first. Never slide head first.
- 18. **INSTRUCT CHILDREN TO NEVER** climb, crawl, or walk on items not intended for such use. Such types of play on top of Monkey Bars, Fort Roof, and Swing Beams greatly increase the risk of a serious or fatal fall.
- 19. INSTRUCT CHILDREN that only one child can be on Wave Slide at a time with a maximum weight of 140 pounds.

#### Choosing a location for your play system

When selecting your play site, always keep the child's safety in mind. Here are some recommendations that should help you achieve a safe play area.

- 1. The play system should be located on solid level ground free of objects that could cause injury such as, but not limited to, tree stumps, roots, and large rocks. Stationary components such as ladders and slides must be no less than SIX FEET (1.8 meters) from any structure or obstruction such as a fence, garage, house, tree or overhanging branches, electrical wires or clotheslines. Any swinging equipment must be a minimum distance of TWICE the height of the swing beam away from any structures or obstructions as specified above. We also recommend that you do not install your play system near a lake, river, swimming pool or other water hazards.
- 2. If anchoring your play system, all underground utilities must be located in play zone before starting assembly of play system.
- 3. Try to locate slide out of direct sunlight to reduce the likelihood of serious burns. A slide that faces north will receive the least direct sunlight.
- 4. It is recommended not to place a set on sandy soil or loose fill as it may require additional anchoring in that situation.
- 5. Do not install your play system over concrete, asphalt, packed earth, grass, carpet, or any other hard surface. A fall onto a hard surface can result in serious injury to the play system user.



### Choosing a surfacing material

The consumer shall provide playground surfacing materials under and around residential play equipment that conforms to the recommendations of the Consumer Product Safety Commission's Outdoor Home Playground Safety Handbook publications #324. A copy of the section relating to surfacing materials is included in the installation instructions. Free copies of this handbook are available on line at www.cpsc.gov or by contacting the CPSC Publications Office in Washington D.C. 20207.

The URL is http://www.cpsc.gov/cpscpub/pubs/324.pdf and the file size is 456.5KB

Playground equipment should never be placed on hard surfaces such as concrete or asphalt. Do not use loose fill surfacing on top of hard surfaces such as concrete or asphalt. While grass may appear to be acceptable, it may quickly turn to hard packed earth in areas of high traffic. Shredded bark mulch, wood chips, fine sand or fine gravel are considered to be acceptable shock absorbing surfaces when installed and maintained at a sufficient depth under and around playground equipment. The U.S. Product Safety Commission (CPSC) estimates that about 100,000 playground equipment-related injuries resulting from falls to the ground surface are treated annually in U.S. hospital's emergency rooms. Injuries involving this hazard pattern tend to be the most serious of all playground injuries, and have a potential to be fatal, particularly when the injury is to the head. The surface under and around playground equipment can be a major factor in determining the injury-causing potential of a fall. It is self evident that a fall onto a shock absorbing surface is less likely to cause a serious injury than a fall onto a hard surface.

The following information is intended to assist in comparing the relative shock-absorbing properties of various materials. No particular material is recommended over another. However, each material is only effective when properly maintained. Materials should be checked periodically and replenished to maintain correct depth as determined necessary for your equipment. The choice of a material depends on the type and height of your playground equipment, the availability of the material in your area, and its cost.

Table 3.1 lists the maximum height from which a child would not be expected to sustain a life-threatening head injury in a fall onto four different loose-fill surfacing materials if they are installed and maintained at depths of 6, 9, and 12 inches. However, it should be recognized that all injuries due to falls cannot be prevented no matter what surfacing material is used.

TABLE 3.1 Fall Height in Feet From Which a Life Threatening Head Injury Would Not Be Expected							
Type of Material 6 in. depth 9 in. depth 12 in. depth							
Double Shredded Bark Mulch	6 ft.	10 ft.	11 ft.				
Wood Chips	6 ft.	7 ft.	12 ft.				
Fine Sand	5 ft.	5 ft.	9 ft.				
Fine Gravel	6 ft.	7 ft.	10 ft.				

Surfacing in "compressed" depths - See CPS & ASTM for Fall Heights of equipment												
Equipment Fall Height	1'	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'
Wood Chips	6"	6"	6"	6"	6"	6"	6 1/2"	7 1/2"	8 1/4"	9"	12"	13"
Double Shredded Bark Mulch	6"	6"	6"	6"	7"	8"	9"	9 3/4"	10 1/2"	11 1/2"	12"	13"
Engineered Wood Fibers	6"	6"	6"	7"	8 1/2"	9"	9 1/2"	10 1/4"	10 3/4"	11"	10 3/4"	12"
Fine Sand	6"	6"	6 1/2"	8"	9	10"	10 1/2"	11 1/4"	12"	13 1/2"	14 3/4"	16"
Coarse Sand	6"	6"	7 1/2"	9"	10 1/2"	12"	14"	16"	18"	20"	22"	24"
Fine Gravel	6"	6"	6"	6 3/4"	8"	9"	10"	10 3/4"	11 1/2"	12"	13 1/4"	14 1/2"
Medium Gravel	6"	6 1/4"	8"	9"	9"	12"	14"	16"	18"	20"	22"	24"

Chart obtained from U.S. Consumer Product Safety Commission Handbook for Public Playground Safety

**NOTICE:** It is recommended to use containment, such as digging out around the perimeter and/or lining the perimeter with landscape edging for surfacing materials.

Installations of rubber tiles or poured-in-place surfaces (other than loose-fill materials) generally require a professional and are not "do-it-yourself" projects.

When surfacing is to be used it is recommended to use Playground Surfacing Materials (other than loose-fill materials) which comply to the safety standard ASTM 1292 Standard Specification for Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment.

### Maintenance of your play system

To ensure safe enjoyment of your Rainbow Play System for years to come, follow these maintenance tips:

- 1. At the beginning of each usage season and twice each month, check and tighten as needed (but do not over tighten causing the wood to crack) all nuts and bolts. Acorn nuts should be tightened to 5 foot pounds of torque. Hardware used on swinging elements should be checked at least twice a month to ensure proper fastening.
- 2. **At the beginning of each usage season and twice each month,** check all coverings for bolts and sharp edges to be certain they are in place. Replace when necessary.
- 3. Oil all metallic moving parts and grease Tire Swivel monthly during the usage period.
- 4. **Check** all moving parts including swing seats, ropes, and chains for wear, rust, or other deterioration and replace as needed.
- 5. **Check** all metal parts for rust. If needed, sand and repaint using a nonlead-based paint meeting the requirements of Title 16 CFR Part 1303.
- 6. Check the S-Hooks on the chains to ensure the gap is less than .040 inches. Tighten/close as necessary.
- 7. **Remove** plastic swing seats and take indoors or do not use when temperature drops below 32° Fahrenheit. Reinstall swing seats when the cold season is complete.
- 8. **Check, twice a month,** the depth of loose fill protective surfacing materials to prevent compaction and to maintain appropriate depth. Rake or replace as necessary.
- 9. When you are ready to dispose of your playset, make sure all metal, plastic and wood components are disposed of in accordance with local waste ordinances and ensure that no unreasonable hazards exist.
- 10. **On a yearly basis**, we recommend that you coat your play system with a sealant or preservative. You may also want to spot sand areas before sealing. Be sure that the sealant you select is non-toxic and child safe.
- 11. **Check** all wood members for deterioration and splinters. Spot sand any areas that are checking or splintering. If parts are deteriorating, replace as needed.

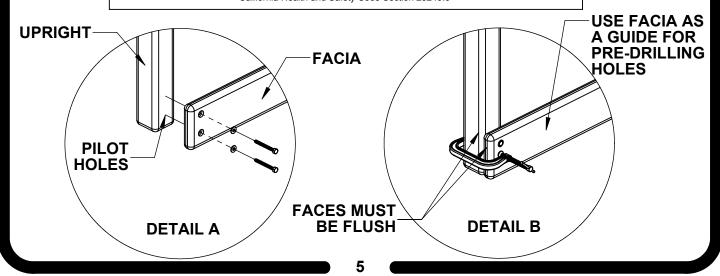
#### **Helpful Installation Hints**

- 1. Wear safety glasses to protect your eyes from flying wood chips when drilling or cutting.
- 2. **Verify that all bolts and screws are secured tightly and all acorn nuts are snug** (acorn nuts should be tightened to 5 foot pounds of torque).
- 3. DO NOT allow children to play on the play system until it is completely assembled in a proper location.
- 4. **DO NOT** allow children in the area while you are assembling your play system. Many of the Rainbow Play Systems, Inc. components are very heavy and could seriously injure a child.
- 5. After thoroughly reading all information and properly locating your play system site, carefully unpack parts. As you unpack your play system, keep the parts list handy and become familiar with each part before beginning assembly. Remember that a little extra time spent familiarizing yourself with the parts and instructions before you begin will help avoid mistakes and save you time later.
- 6. **Group** both wood and non-wood parts together in accordance to each page, or Step, of this assembly manual. Doing this now will help you quickly locate parts and assemble the set with ease.
- 7. **Sort** your hardware into groups of similar hardware pieces. Use a solid surface, such as the empty boxes, to ensure you do not lose any hardware.
- 8. **Before** starting each Step, thoroughly read all of the instructions to ensure all information is understood. Pay special attention to the orientation of each part, details & notes, and proper usage of hardware. Each piece of hardware is required for a certain part of the assembly.
- 9. **Certain** steps of the assembly are best performed on a hard flat surface to ensure proper and accurate assembly.
- 10. **All** Lag Bolts must have pre-drilled holes 2" deep (as shown in Detail A). Use a 1/8" drill bit for all 1/4" and 5/16" Lag Bolts and use a 1/4" drill bit for all 3/8" Lag Bolts. Lag Bolts can be difficult to put in knot holes. Pre-drilling pilot holes will help to prevent the Lag Bolts from breaking.
- 11. All #14 Phillips Pan Head Tap Screws must have pre-drilled holes 1/2" deep. Use a 1/8" drill bit.
- 12. **Use** a clamp to secure facias flush to the Uprights and use holes in facia as a guide for placing Lag Bolt Pilot Holes (as shown in Detail B).
- 13. **Verify** Facias are flush with Uprights.
- 14. **Check** assembly periodically to ensure the set is level and all facias are square to the uprights.
- 15. If a gap occurs between boards when inserting Screws or Lag Bolts, back out hardware and apply pressure to the top board while reinserting hardware in the same hole.

#### WARNING

Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

California Health and Safety Code Section 25249.6



### **COMMONLY ASKED QUESTIONS**

Question: How do I know when Lag Bolts and other Fasteners are tightened properly?

Answer: Lag Bolts and other Fasteners are tight when the head of the Lag Bolt and Washer are firmly compressed against the wood. If splintering occurs, that is an indication you are over tightening the Lag Bolts and other Fasteners. (Splintering is when the wood fibers fracture out from under the washers).

Question: What should I do if a Lag Bolt or other Fastener lines up with a knot, or if the Lag Bolt

breaks?

Answer: There is extra Hardware provided with the set for this reason. Re-Drill a new hole with

a 1/8" Drill Bit in a new direction to miss the obstruction.

Question: What if my Play System is leaning and/or rocks?

Answer: This is caused by unleveled ground under the Base and Support Wings of the Play

System. It may be necessary to remove or add some soil beneath the Play System.

to make it level. Ground Stakes, when installed, will also provide stability.

Question: What if my Play System has cracks on the wood or seems to be developing cracks?

Answer: Seasonal checks, surface cracks, and knot holes are natural characteristics of all

wooden play equipment. A check is a separation of the wood fibers running with the grain. This is caused by varying temperature and moisture conditions. By coating your Play System annually with a sealant or preservative, you can help protect your Play System from developing (not stopping) seasonal checks. Please remember to follow all installation instructions, including installing the play set on solid level ground.

Question: What is the sticky substance that appears on the wood?

Answer: The sticky substance that may appear on the wood is called pitch. It is common for

the lumber to have occasional pitch seepage which does not affect the structural integrity of the part. Pitch provides the natural rot resistant characteristics of the lumber. If play surfaces or play items become overly sticky with pitch use rubbing

alcohol to safely remove.

Question: What accessories may be added or what modifications can be made to my Rainbow

boxed kit set?

Answer: Rainbow boxed kit sets are complete kits and are not modular. Play sets with

unauthorized accessories or modifications will not be covered under warranty.

Non-residential use of the play set voids warranty.

Question: Is my child old enough to use all play items on my set?

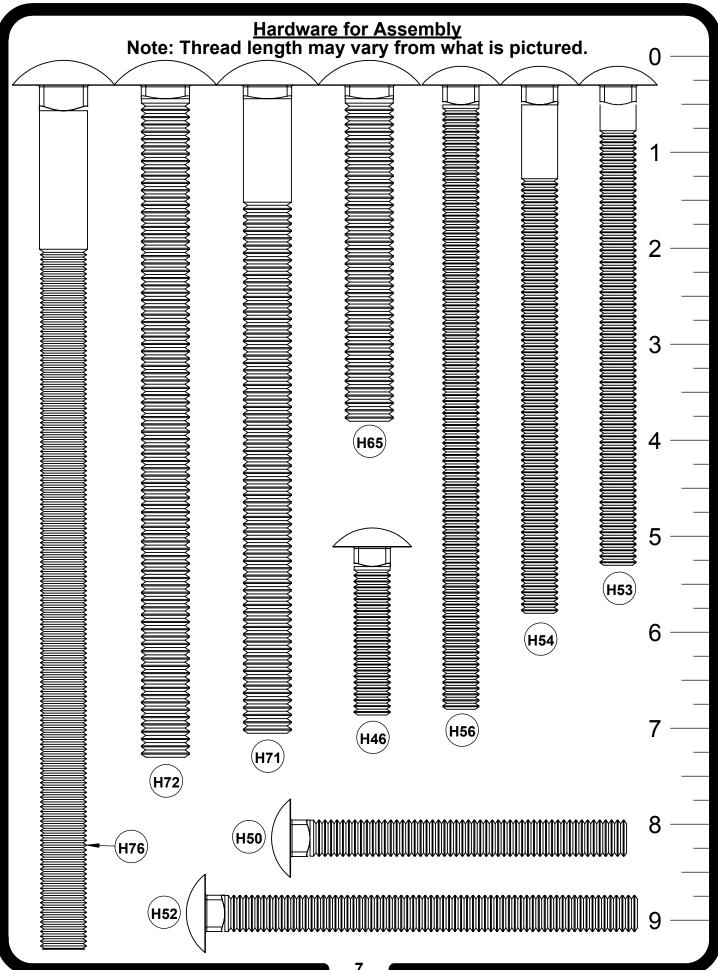
Answer: All play items on Rainbow boxed kit sets are designed

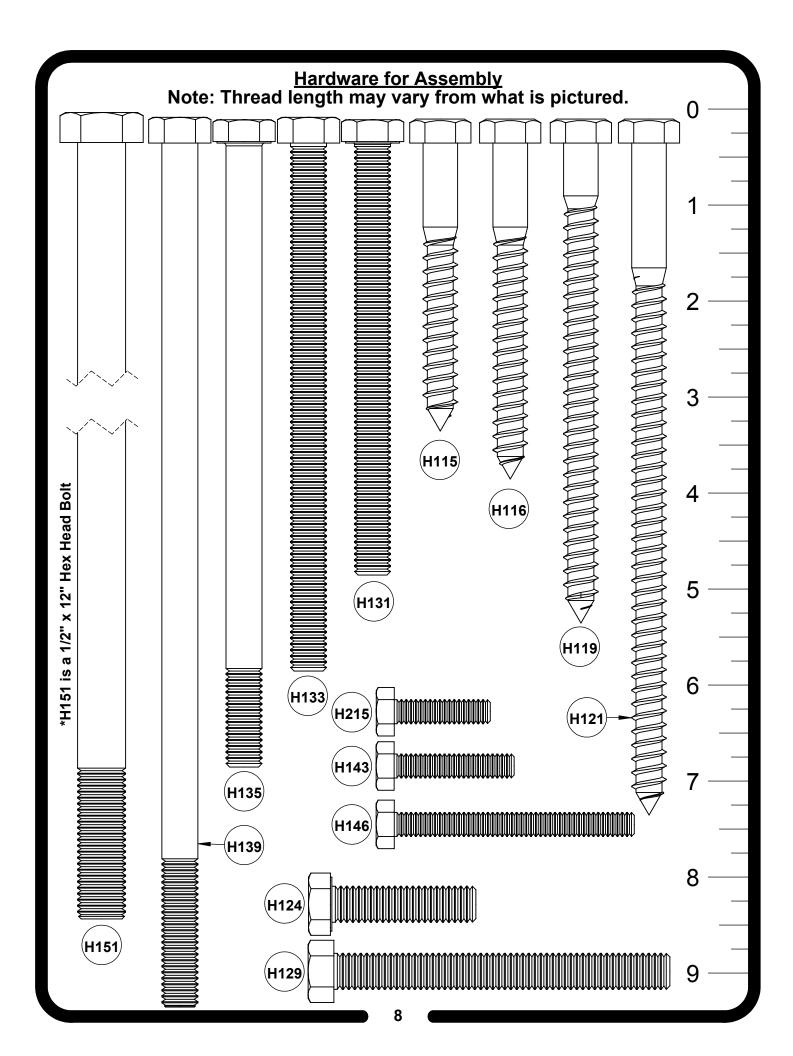
for children ages 3 to 12, but it is the end users

responsibility to determine suitability of use by their

children for each play item.



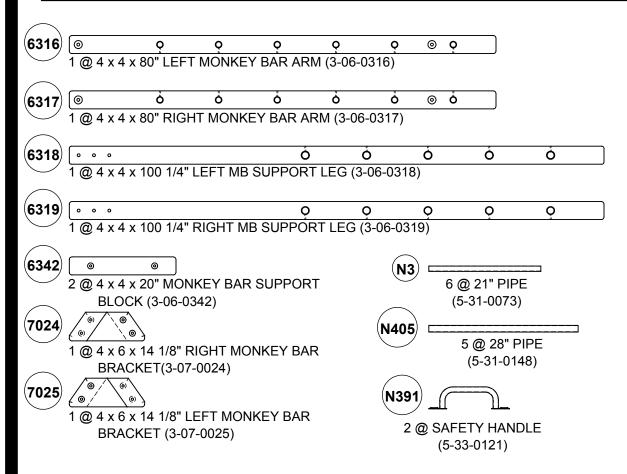




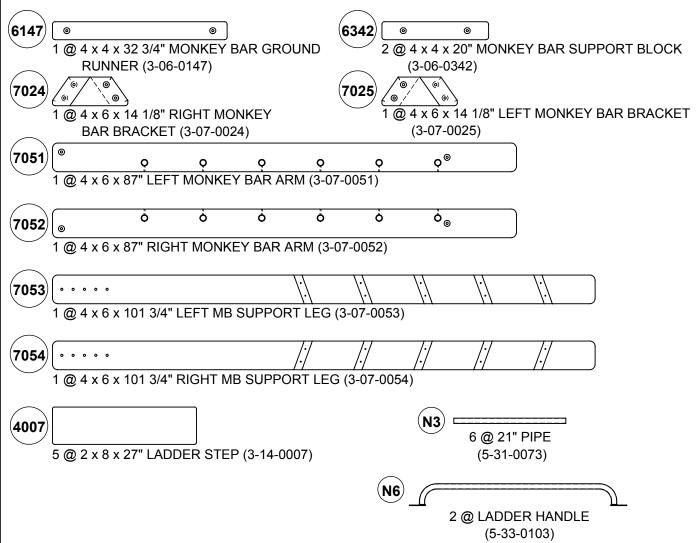
# Hardware for Assembly \*Note: Thread length may vary from what is pictured. H104 (H97 (H108 (H188 (H100 (H32 (H155) 6 (H153) H152 (H34) . H194 8 (H30) 9

### <u>Hardware for Assembly</u> \*Note: Thread length may vary from what is pictured. H12 **H5 H4 H3** H18 H1 H7 H29 H13 **TOOLS REQUIRED FOR ASSEMBLY** 7/16" Deep Well Socket 1/2" Deep Well Socket 9/16" Deep Well Socket Electric Impact Gun or 1/4" Tape Measure Carpenters Level and 3/8" Ratchet 1/8" Drill Bit Carpenters Square 1/4" Drill Bit Rubber Mallet (optional) 9/16" Box Wrench 9/16" Drill Bit Claw Hammer 8' Step Ladder Safety Glasses Wood Clamp Torque Wrench Standard or Cordless Drill with #2 & #3 Phillips Bits Adult Helper Crescent Wrench

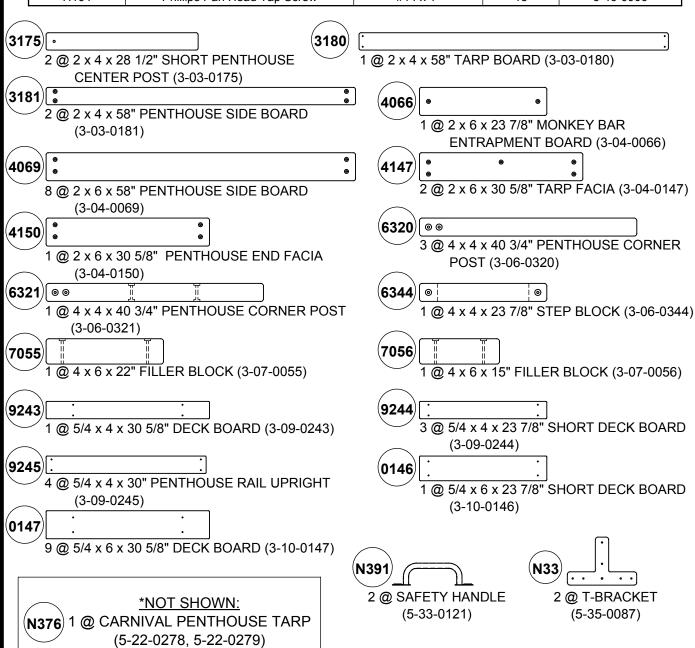
	Carnival 4x4 Mon	key Bar Pa	arts Lis	st
<u>F/N#</u>	DESCRIPTION	<u>DIMENSION</u>	<u>QTY</u>	FOUND IN
H3	Flat Washer	3/8"	15	5-46-0902
H4	Flat Washer	1/2"	4	5-46-0902
H5	Flat Washer	3/4"	2	5-46-0902
H11	Lock Washer	3/8"	2	5-46-0902
H12	Lock Washer	1/2"	2	5-46-0902
H17	Standard Nut	3/8"	2	5-46-0902
H18	Standard Nut	1/2"	2	5-46-0902
H28	Acorn Nut	3/8"	2	5-46-0902
H29	Acorn Nut	1/2"	2	5-46-0902
H71	Carriage Bolt	1/2" x 6 3/4"	2	5-46-0902
H56	Carriage Bolt	3/8" x 6 1/2"	2	5-46-0902
H104	Lag Bolt	5/16" x 2"	4	5-46-0695
H116	Lag Bolt	3/8" x 3 1/2"	8	5-46-0902
H119	Lag Bolt	3/8" x 5"	4	5-46-0902
H139	Hex Head Bolt	3/8" x 9"	1	5-46-0902
H216	Phillips Pan Head Self Drilling Screw	#8 x 1 1/2"	22	5-46-0902

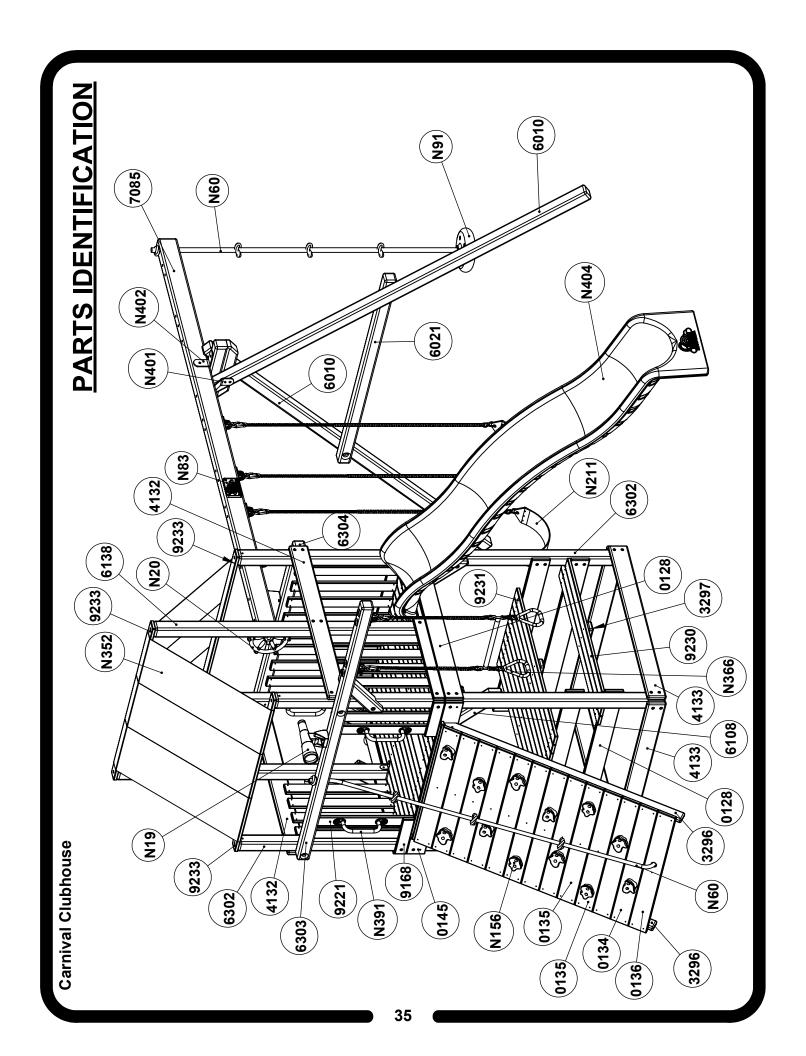


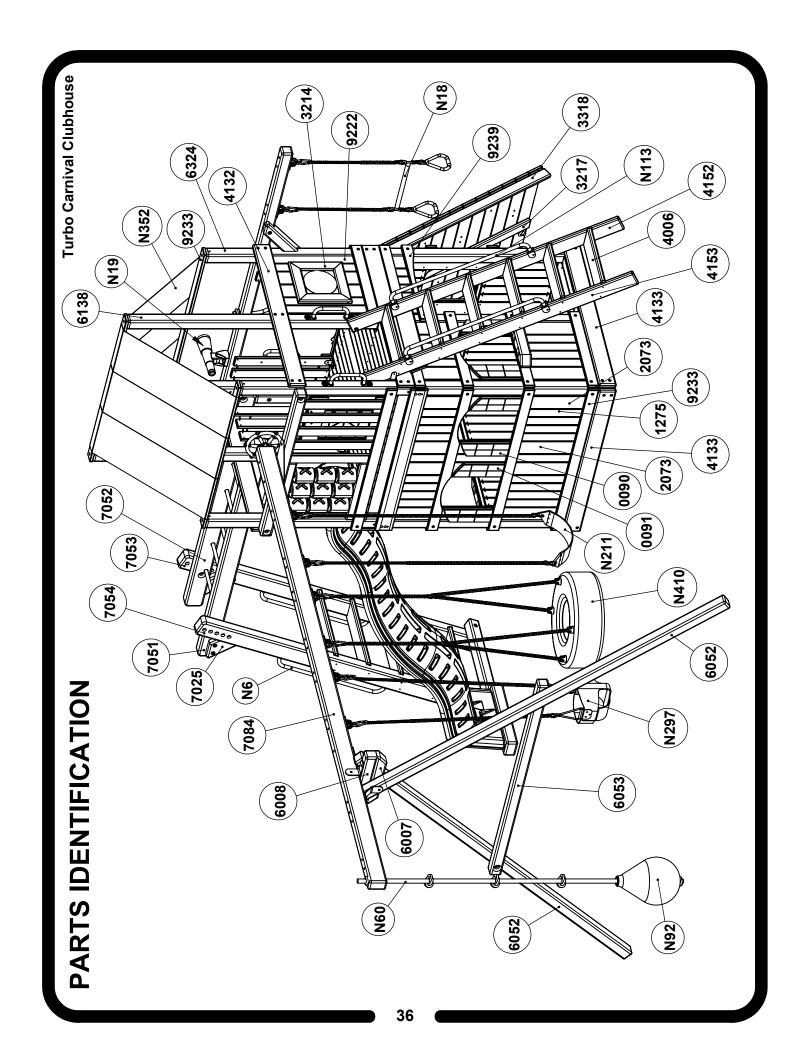
Carnival 4x6 Monkey Bar Parts List						
<u>F/N#</u>	DESCRIPTION	<u>DIMENSION</u>	QTY	FOUND IN		
H3	Standard Nut	3/8"	4	5-46-0903		
H7	Acorn Nut	3/8"	4	5-46-0903		
H74	Carriage Bolt	3/8" x 6 1/2"	4	5-46-0903		
H104	Lag Bolt	5/16" x 2"	4	5-46-0695		
H116	Lag Bolt	3/8" x 3 1/2"	8	5-46-0903		
H119	Lag Bolt	3/8" x 5"	6	5-46-0903		
H124	Hex Head Bolt	3/8" x 9"	1	5-46-0903		
H155	Lock Washer	3/8"	4	5-46-0903		
H164	Flat Washer	3/8"	19	5-46-0903		
H166	Flat Washer	1/2"	4	5-46-0903		
H192	Phillips Wood Screw	#8 x 3 1/2"	20	5-46-0903		
H216	Phillips Pan Head Self Drilling Screw	#8 x 1 1/2"	12	5-46-0903		



Carnival Penthouse Parts List							
<u>F/N#</u>	<u>DESCRIPTION</u>	<u>DIMENSION</u>	<u>QTY</u>	FOUND IN			
H1	Flat Washer	1/4"	56	5-46-0906			
H3	Flat Washer	3/8"	20	5-46-0906			
H9	Lock Washer	1/4"	3	5-46-0906			
H32	4 Prong T-Nut	1/4"	3	5-46-0906			
H97	Lag Bolt	1/4" x 3"	54	5-46-0906			
H104	Lag Bolt	5/16" x 2"	4	5-46-0906			
H116	Lag Bolt	3/8" x 3 1/2"	2	5-46-0906			
H119	Lag Bolt	3/8" x 5"	14	5-46-0906			
H121	Lag Bolt	3/8" x 7"	4	5-46-0906			
H146	Hex Head Bolt	1/4" x 2 1/2"	2	5-46-0906			
H215	Hex Head Bolt	1/4" x 1"	1	5-46-0906			
H154	Phillips Wood Screw	#8 x 2"	80	5-46-0906			
H164	Phillips Pan Head Tap Screw	#14 x 1"	18	5-46-0906			







### 4x4 Monkey Bar Assembly

\*NOTE: 4x4 Monkey Bar can only be mounted on the Carnival Clubhouse and MUST NOT have a Penthouse mounted on it.

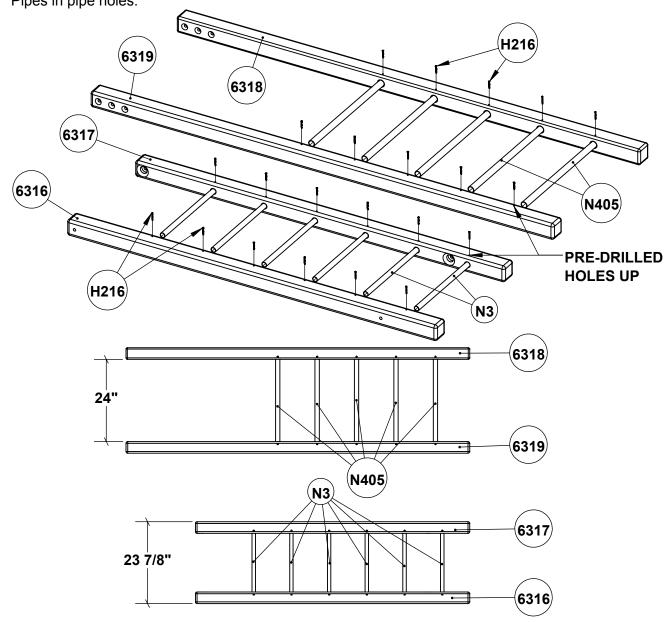
- 1. Place Left and Right Monkey Bar Arms (6316) (6317) and Left and Right Monkey Bar Support Legs (6318) (6319) on a flat surface directly across from each other with pre-drilled hole facing up (as (shown).
- 2. Insert Pipes (N3) in to pipe holes into both Monkey Bar Arms (6316) (6317) to connect the two Monkey Bar Arms (6316) (6317) together.

\*NOTE: Monkey Bar assembly must measure 23 7/8" wide when properly assembled.

- 3. Ensure width of Monkey Bar assembly is 23 7/8" wide (as shown) and insert #8 Hardware (H216) through pre-drilled holes in Monkey Bar Arms (6316) (6317) into Pipes (N3), to secure Pipes in pipe holes.
- 4. Insert Pipes (N405) in to pipe holes into both Monkey Bar Support Legs (6318) (6319) to connect the two Monkey Bar Support Legs (6318) (6319) together.

\*NOTE: Inside of Monkey Bar Support assembly must measure 24" wide when properly assembled.

5. Ensure width of Monkey Bar Support assembly is **24"** wide (as shown) and insert #8 Hardware **(H216)** through pre-drilled holes in Monkey Bar Support Legs **(6318) (6319)** into Pipes **(N405)**, to secure Pipes in pipe holes.



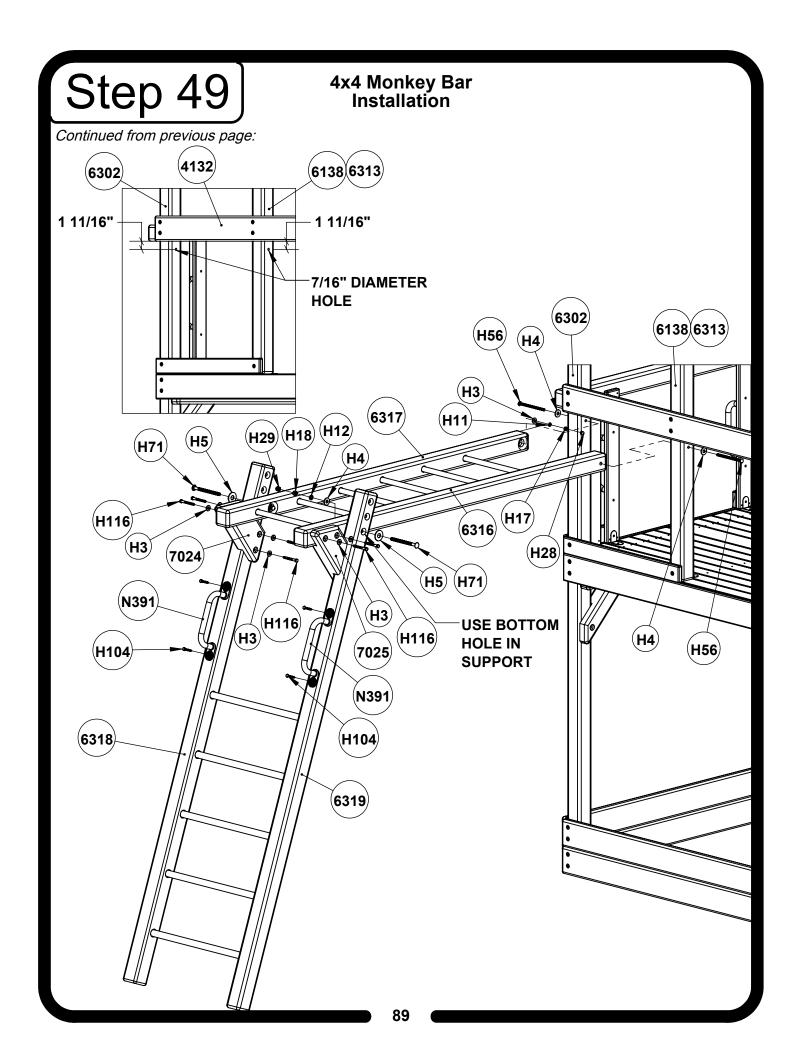
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### 4x4 Monkey Bar Installation

\*NOTE: A Helper will be needed to complete this Step.

\*NOTE: Rail Uprights (9022) should not have been installed in the opening that the Monkey Bar is being installed in. If Rail Uprights were installed, remove and reinstall after Monkey Bar has been installed.

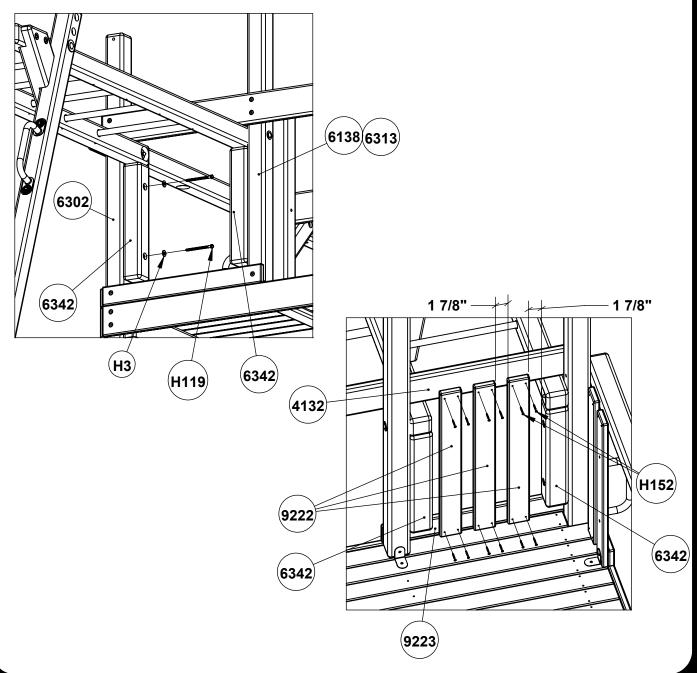
- In the opening the Monkey Bar is being installed in, measure down from bottom of 6 Hole Facia (4132)
   1 11/16" and drill a hole in each Corner Upright (6302) and Center Post (6138) (6313), using a 7/16" drill bit (as shown in Inset A).
  - \*NOTE: The 7/16" diameter holes must be drilled in the centers of the Corner Upright and Center Post.
- 2. On the ground, position Monkey Bar inside of Monkey Bar Support, lining up the bottom hole in Support with the back counter bored holes in Monkey Bar.
  - \*NOTE: Orient the Monkey Bar Support so that the previously installed Hardware screwed into the Pipes is facing toward the set. Orient the Monkey Bar so that the previously installed Hardware screwed into the Pipes is facing down.
- 3. Attach Monkey Bar Support to Monkey Bar using 3/4" Hardware (H5) and 1/2" Hardware (H4) (H12) (H18) (H71). Do not fully tighten Hardware at this time.
- 4. Lift up on Monkey Bar and position Monkey Bar Brackets (7024) (7025) against Monkey Bar and Support so that all faces of Monkey Bar, Support and Brackets are flush. Attach Monkey Bar Brackets to Monkey Bar and Monkey Bar Support using 3/8" Hardware (H3) (H116).
  - \*NOTE: There should be no gaps in all adjoining faces of Monkey Bar Brackets, Monkey Bar & Monkey Bar Support when properly installed.
- 5. Lift Monkey Bar assembly up into opening and align holes in Monkey Bar with previously drilled holes in Corner Upright (6302) and Center Post (6138) (6313).
- 6. Attach Monkey Bar to Corner Upright (6302) and Center Post (6138) (6313) using 1/2" Hardware (H4) and 3/8" Hardware (H3) (H11) (H17) (H28) (H56).
- 7. Check that Monkey Bar is level and fully tighten Hardware from #3. Attach 1/2" Hardware (**H29**) to the end of 1/2" Hardware (**H71**) from #3.
- 8. Position Safety Handles (N391) on Support, in approximate location shown, and attach Safety Handles (N391) to Support using 5/16" Hardware (H104).



## Monkey Bar Support Block & Rail Upright Installation

- 1. Position Monkey Bar Support Blocks (6342) against Corner Upright (6302) and Center Post (6138) (6313), pushed up tight to underside of Monkey Bar.
- 2. Attach Monkey Bar Support Blocks (6342) using 3/8" Hardware (H3) (H119).
- 3. On inside of set, evenly space three Rail Uprights (9222) across Corner Facia (9223) and 6 Hole Facia (4132), in between Monkey Bar Support Blocks (6342). Attach Rail Uprights using #8 Hardware (H152).

\*NOTE: Gaps between Rail Uprights and Support Blocks should measure approximately 1 7/8" when properly installed.



### 4x6 Monkey Bar Assembly

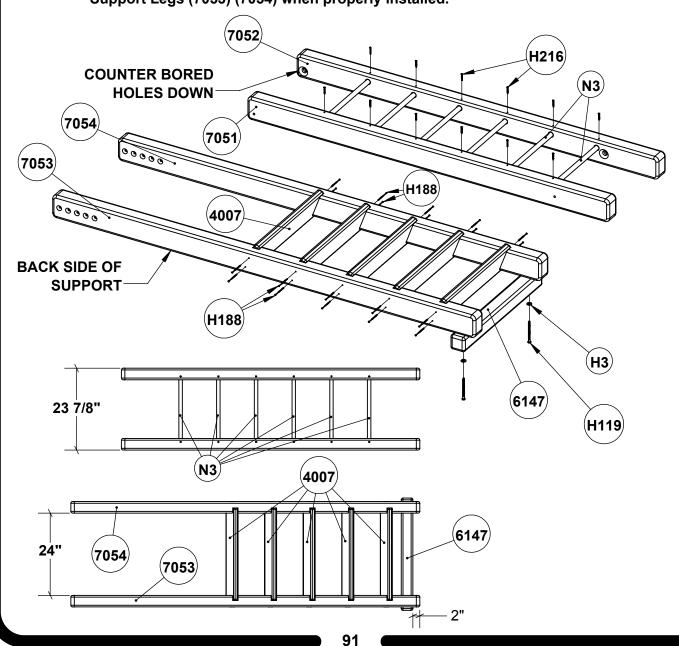
- 1. Place Left and Right Monkey Bar Arms (7051) (7052) on a flat surface directly across from each other, oriented with counter bored holes facing down as shown.
- 2. Insert Pipes (N3) in to pipe holes into both Monkey Bar Arms (7051) (7052) to connect the two Monkey Bar Arms (7051) (7052) together.

\*NOTE: Monkey Bar assembly must measure 23 7/8" wide when properly assembled.

- 3. Ensure width of Monkey Bar assembly is 23 7/8" wide (as shown) and insert #8 Hardware (H216) through pre-drilled holes in Monkey Bar Arms (7051) (7052) into Pipes (N3), to secure Pipes in pipe holes.
- 4. Position Monkey Bar Support Legs (7053) (7054) on flat surface directly across from each other, with back sides of Support Legs facing up.
- 5. Center Ladder Steps (4007) in notches of Support Legs (7053) (7054) and attach using #8 Hardware (H188).

\*NOTÉ: Inside faces of Support Legs must measure 24" when properly assembled.

- 6. Measure up 2" from bottom of Support Legs (7053) (7054) and attach Monkey Bar Ground Runner (6147) to back side of Monkey Bar Support using 3/8" Hardware (H3) (H119).
  - \*NOTÉ: Counter bored holés in Monkey Bar Ground Runner (6147) should be centered on Support Legs (7053) (7054) when properly installed.



### 4x6 Monkey Bar Installation

\*NOTE: A Helper will be needed to complete this Step.

\*NOTE: Processes will be the same for mounting the 4x6 Monkey Bar on both the Carnival

and Turbo Carnival Clubhouses.

\*NOTE: Rail Uprights (9222) should not have been installed in the opening that the Monkey Bar is being installed in. If Rail Uprights were installed, remove and reinstall after

Monkey Bar has been installed.

In the opening the Monkey Bar is being installed in, measure down from bottom of 6 Hole Facia (4132)
 1 11/16" and drill a hole in each Corner Upright (6302) (6324) and Center Post (6133) (6140), using a 7/16" drill bit (as shown in Inset A).

\*NOTE: The 7/16" diameter holes must be drilled in the centers of the Corner Upright and Center Post.

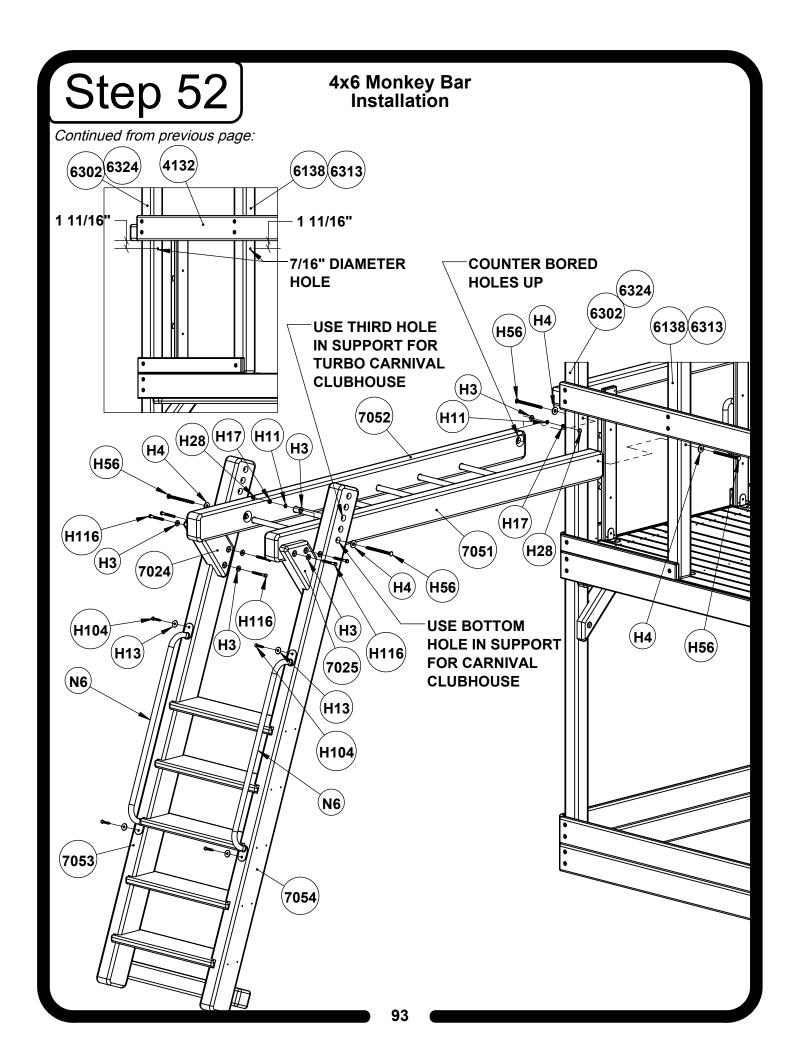
2. On the ground, position Monkey Bar inside of Monkey Bar Support, lining up the bottom holes in the Support with the back counter bored hole in the Monkey Bar, if installing the Monkey Bar on the Carnival Clubhouse. If installing the Monkey Bar on a Turbo Carnival Clubhouse, use the third hole in the Monkey Bar Support (as shown).

\*NOTE: Monkey Bar must be oriented, with the counter bored holes towards the end of the Monkey Bar, pointing up (as shown).

- 3. Attach Monkey Bar Support to Monkey Bar using 1/2" Hardware (H4) and 3/8" Hardware (H3) (H11) (H17) (H56). Do not fully tighten Hardware at this time.
- 4. Lift up on Monkey Bar and position Monkey Bar Brackets (7024) (7025) against Monkey Bar and Support so that all faces of Monkey Bar, Support and Brackets are flush. Attach Monkey Bar Brackets to Monkey Bar and Monkey Bar Support using 3/8" Hardware (H3) (H116).

\*NOTE: There should be no gaps in all adjoining faces of Monkey Bar Brackets, Monkey Bar & Monkey Bar Support when properly installed.

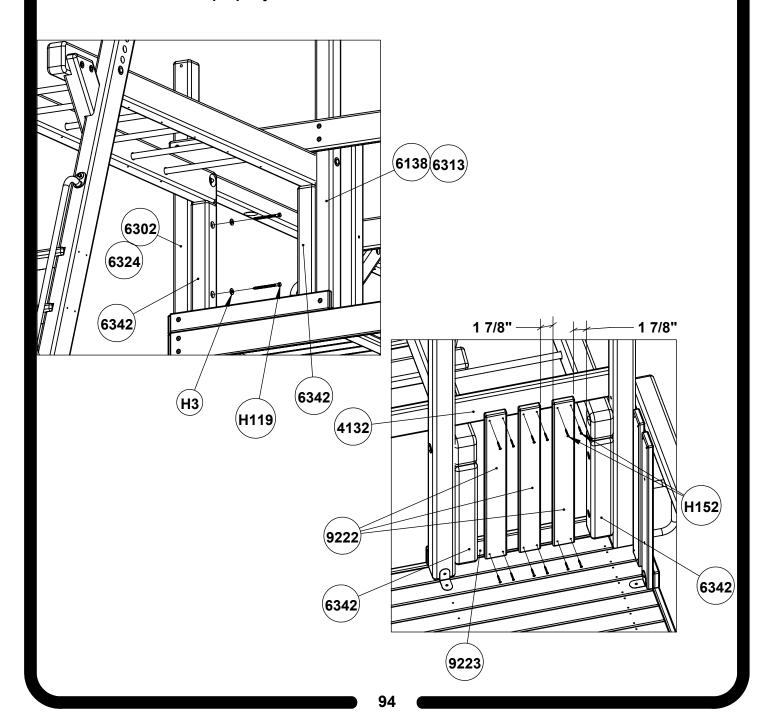
- 5. Lift Monkey Bar assembly up into opening and align holes in Monkey Bar with previously drilled holes in Corner Upright (6302) (6324) and Center Post (6138) (6313).
- 6. Attach Monkey Bar to Corner Upright (6302) (6324) and Center Post (6138) (6313) using 1/2" Hardware (H4) and 3/8" Hardware (H3) (H11) (H17) (H28) (H56).
- 7. Check that Monkey Bar is level and fully tighten Hardware from #3. Attach 3/8" Hardware (H28) to the end of 3/8" Hardware (H56) from #3.
- 8. Position Ladder Handles (**N60**) in approximate locations shown, and attach Ladder Handles (**N6**) to Support using 5/16" Hardware (**H104**) and 3/8" Hardware (**H13**).



### Monkey Bar Support Block & Rail Upright Installation

- 1. Position Monkey Bar Support Blocks (6342) against Corner Upright (6302) (6324) and Center Post (6138) (6313), pushed up tight to underside of Monkey Bar.
- 2. Attach Monkey Bar Support Blocks (6342) using 3/8" Hardware (H3) (H119).
- 3. On inside of set, evenly space three Rail Uprights (9222) across Corner Facia (9223) and 6 Hole Facia (4132), in between Monkey Bar Support Blocks (6342). Attach Rail Uprights using #8 Hardware (H152).

\*NOTE: Gaps between Rail Uprights and Support Blocks should measure approximately 1 7/8" when properly installed.



### Chin Up Bar Installation

\*NOTE: Depending on set configuration, Chin Up Bar may be mounted on either Monkey

Bar arm.

\*NOTE: The Chin Up Bar can be mounted on both the 4x4 and 4x6 Monkey Bars. 3/8"

Hardware (H129) will be used if mounting the Chin Up Bar on the 4x4 Monkey Bar.

\*NOTE: Installation processes will be the same if mounting the 2 Hole Mount Chin Up Bar

(N380) or the 4 Hole Mount Chin Up Bar (N406).

1. Hold Chin Up Bar (N380) (N406) on underside of Monkey Bar in approximate location shown. Make a mark in center of both holes in Chin Up Bar (N380), or all four holes of the Chin Up Bar (N406).

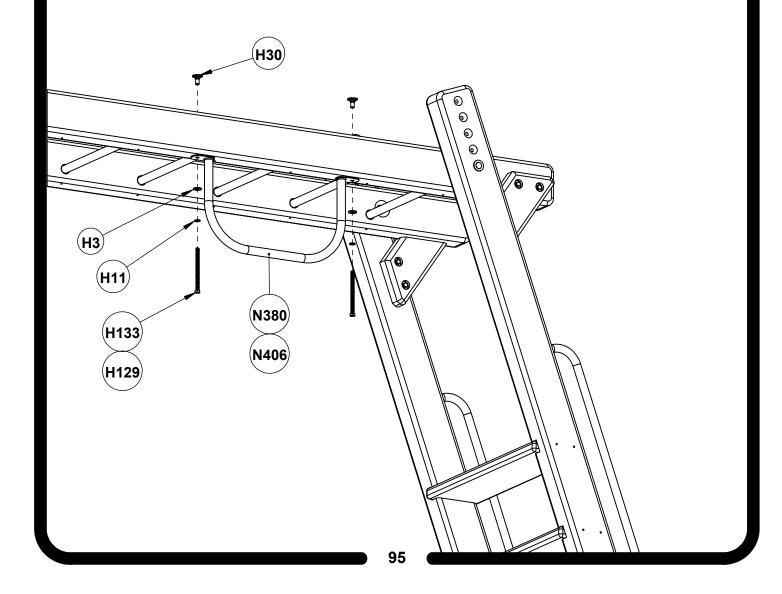
\*NOTE: Be sure when positioning Chin Up Bar, drill holes will not hit Rungs in Monkey Bar.

2. Drill holes through Monkey Bar, on previously made marks, using a 7/16" drill bit.

3. Attach Chin Up Bar (N380) (N406) to Monkey Bar using 3/8" Hardware (H3) (H11) (H30) (H133).

\*NOTE: 3/8" Hardware (H129) will be used in place of 3/8" Hardware (H133) if installing the Chin Up Bar on the 4x4 Monkey Bar.

\*NOTE: A small hammer or mallet may be needed to pound in 3/8" Hardware (H30).



#### **Penthouse Assembly**

\*NOTE: Pre-drill holes for all Lag Bolts using the appropriate drill bit.

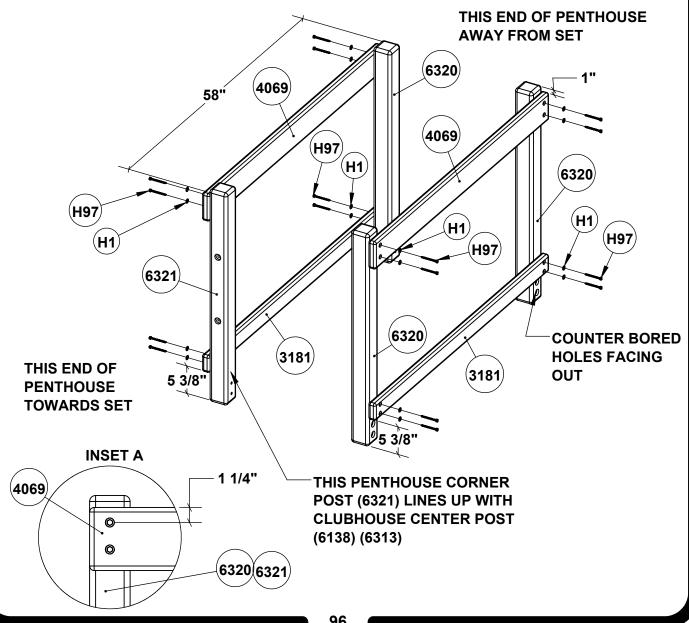
\*NOTE: For ease of assembly, construct Penthouse on a flat, level surface.

1. Lay Penthouse Corner Posts (6320) (6321) on ground 58" apart, with counter bored holes facing up. Measure down 1" from top of Penthouse Corner Posts (6320) (6321) and attach Penthouse Side Boards (4069) using 1/4" Hardware (H1) (H97). Offset holes must be oriented as shown in Inset A.

\*NOTE: Penthouse Corner Post (6321) must be installed on the side of the Penthouse that will line up with the Clubhouse Center Post (6138) (6313), and on the end of the Penthouse that will face towards the set.

\*NOTE: Only install one Penthouse Side Board (3181) if assembling Penthouse with Spiral Slide.

2. Measure up 5 3/8" up from bottom of Penthouse Corner Posts (6320) (6321) and attach Penthouse Side Boards (3181) using 1/4" Hardware (H1) (H97).



#### **Penthouse Assembly**

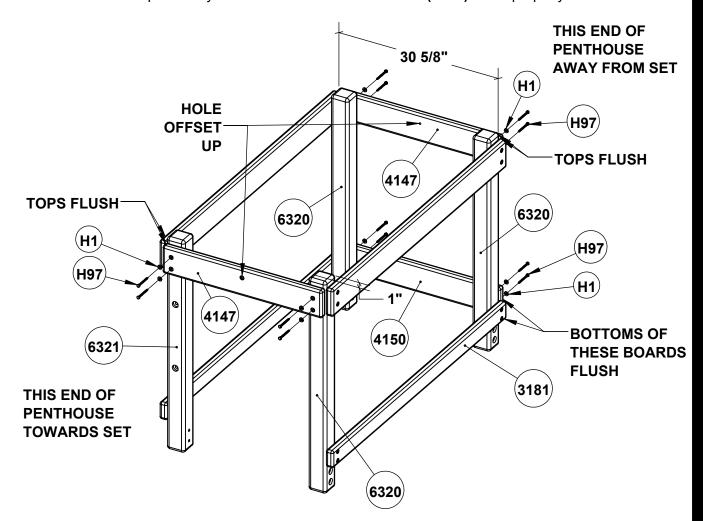
\*NOTE: Ensure now and periodically throughout construction the Facias and Uprights are plumb and level.

\*NOTE: If installing Penthouse with Spiral, be sure to orient Penthouse correctly relative to the side with the Spiral Slide.

1. Stand up Penthouse wall assemblies, positioned **30 5/8"** apart. On each end of Penthouse, measure down **1"** from tops of Penthouse Corner Posts **(6320) (6321)** and attach Tarp Facias **(4147)** using 1/4" Hardware **(H1) (H97)**.

\*NOTE: Center counter bored hole in Tarp Facia (4147) must be offset up when properly installed.

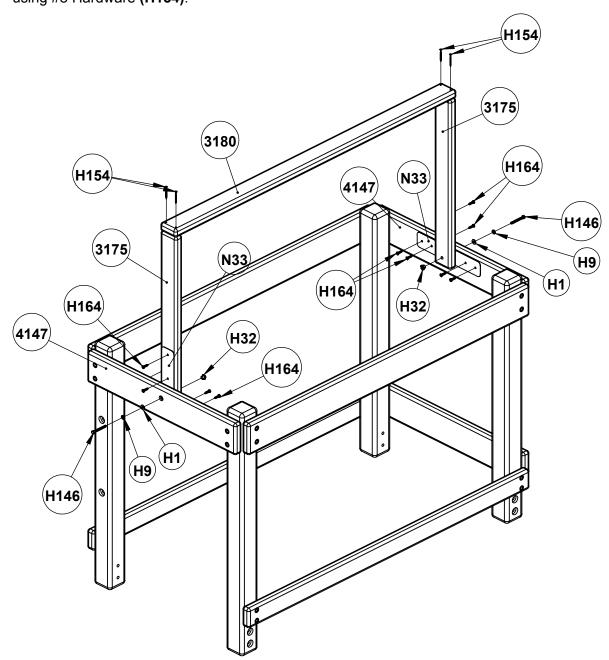
2. On end of Penthouse that faces away from set, attach Penthouse End Facia (4150) to Penthouse Corner Posts (6320) using 1/4" Hardware (H1) (H97). Bottom of Penthouse End Facia (4150) will be flush with bottom of previously installed Penthouse Side Board (3181) when properly installed.



### Penthouse Tarp Board Installation

\*NOTE: If installing wood roof, skip to next Step.

- 1. Using a small hammer, pound 1/4" Hardware (H32) into holes in Short Penthouse Center Posts (3175).
- 2. Attach T-Brackets (N33) and Short Penthouse Center Posts (3175) through center holes in Tarp Facias (4147) using 1/4" Hardware (H1) (H9) (H32) (H146).
- 3. Ensure Short Penthouse Center Posts (3175) are plumb and finish securing T-Brackets (N33) using #14 Hardware (H164).
- 4. Flush Tarp Board (3180) with outside faces of Short Penthouse Center Posts (3175) and attach using #8 Hardware (H154).



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### Penthouse Wood Roof Installation

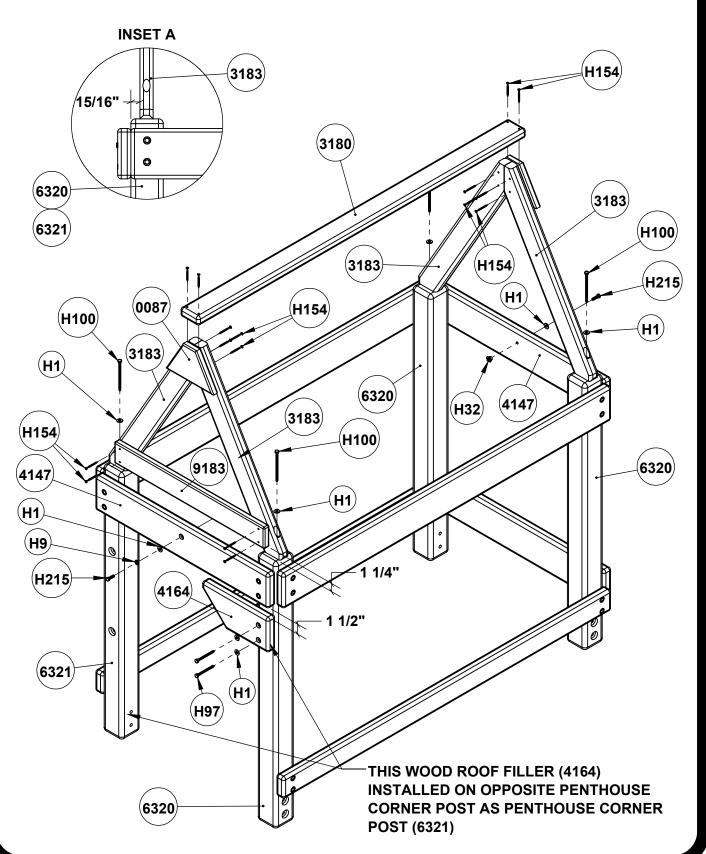
- 1. Install 1/4" Hardware (H1) (H9) (H32) (H215) into center holes in Tarp Facias (4147). A small hammer or mallet may be used to pound 1/4" Hardware (H32) into back of Tarp Facias (4147).
- Position Penthouse Wood Roof Supports (3183) on top of Penthouse Corner Posts (6320) (6321) 15/16" from outside face of Penthouse Corner Posts (as shown in Inset A). Attach Penthouse Roof Supports (3183) using 1/4" Hardware (H1) (H100).

\*NOTE: Penthouse Roof Supports (3183) should be flush together at the tops, centered in the middle of Penthouse when properly installed.

- 3. Line up angled edges of Peak Facias (0087) with Penthouse Wood Roof Supports (3183) and attach using #8 Hardware (H154). Edges of Peak Facias (0087) must not protrude past edges of Penthouse Wood Roof Supports (3183).
- 4. Flush ends of Tarp Board (3180) with outside faces of Peak Facia (0087) and attach using #8 Hardware (H154).
- 5. Measure up 1 1/4" from top of Penthouse Corner Posts (6320) (6321) and attach Entrapment Board (9183) to Penthouse Wood Roof Supports (3183) using #8 Hardware (H154).
  - \*NOTE: Ends of Entrapment Board (9183) must not protrude past edges of Penthouse Wood Roof Supports (3183) when properly installed.
- 6. Position Penthouse Wood Roof Filler (4164) 1 1/2" down from bottom of Tarp Facia (4147) and attach using 1/4" Hardware (H1) (H97).
  - \*NOTE: Wood Roof Filler must be installed on opposite Penthouse Corner Post from Corner Post that will line up with Center Post on set.
  - \*NOTE: Penthouse Roof Boards will be installed in a later step.

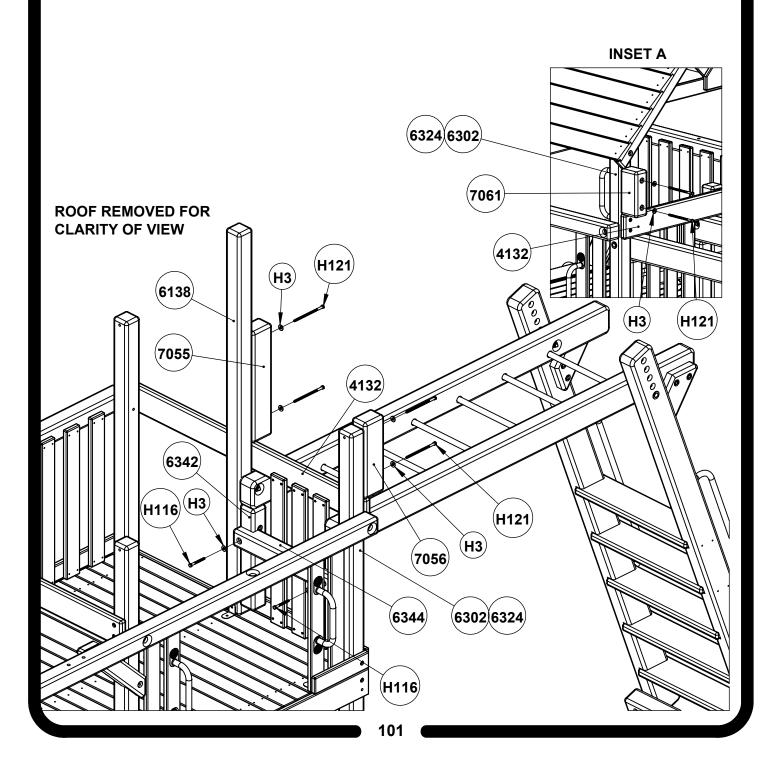
### Penthouse Wood Roof Installation

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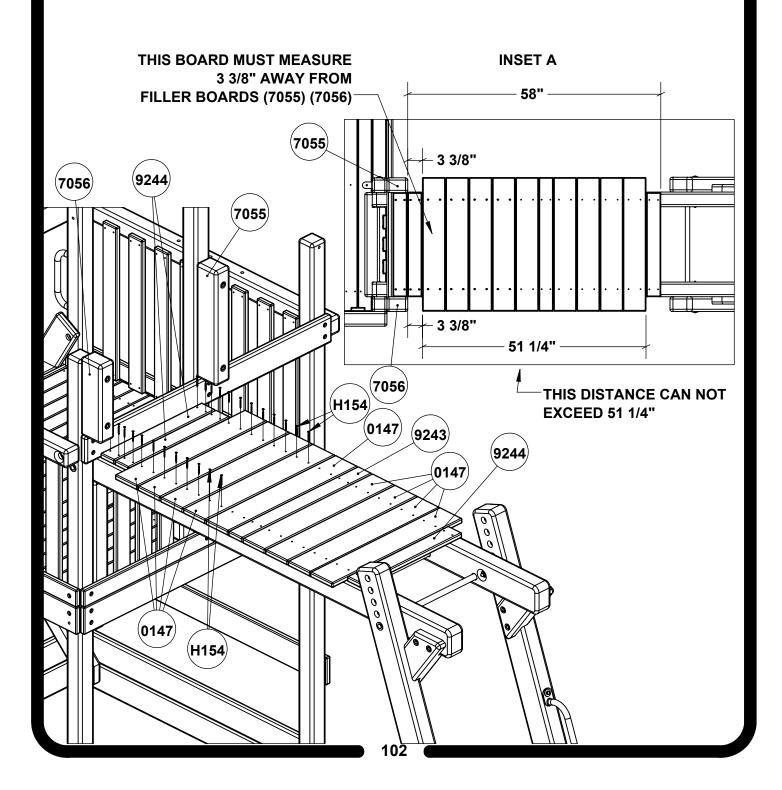
### Penthouse Filler Block & Step Block Installation

- Position Filler Blocks (7055) (7056) against Center Post (6138) and Corner Upright (6302) (6324), directly on top of 6 Hole Facia (4132). Attach Filler Blocks using 3/8" Hardware (H3) (H121).
   \*NOTE: If set has a Wood Roof, install Filler Block (7061) in place of Filler Block (7056) (as shown in Inset A). Filler Block (7055) will be attached to Penthouse in a later Step.
- 2. Position Step Block (6344) against Monkey Bar Support Blocks (6342), at approximate height shown, and attach Step Block using 3/8" Hardware (H3) (H116).



### Penthouse Deck Board Installation

- 1. Layout and evenly space Deck Boards (9243) (9244) (0147), in pattern shown, on top of Monkey Bar using measurements shown in Inset A.
- 2. Attach Deck Boards (9243) (9244) (0147) to Monkey Bar using #8 Hardware (H154).



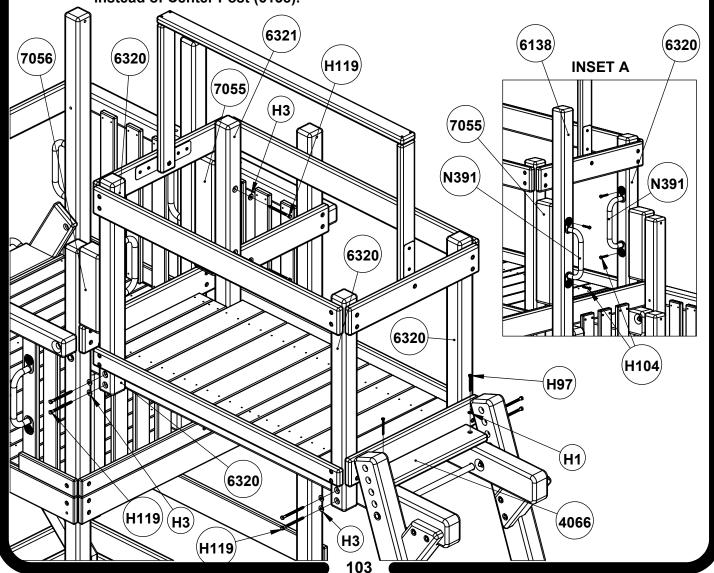
### Penthouse and Handle Installation

\*WARNING: DUE TO ITS EXTREME WEIGHT, IT IS STRONGLY RECOMMENDED THAT AT LEAST THREE PEOPLE HELP TO LIFT PENTHOUSE INTO PLACE.

\*NOTE: Penthouse with Tarp is shown; installation of the Penthouse with Wood Roof will be the same unless otherwise noted.

- 1. Carefully lift Penthouse on top of Monkey Bar, positioning Penthouse on top of previously installed Deck Boards, and pushed up tight to Filler Blocks (7055) (7056).
- 2. Attach Penthouse to Monkey Bars using 3/8" Hardware (H3) (H119).
  - \*NOTE: Bottoms of Penthouse Corner Posts (6320) (6321) should be flush with bottom of Monkey Bar when properly installed.
- 3. Attach Penthouse Corner Post (6321) to Filler Block (7055) using 3/8" Hardware (H3) (H119).
  - \*NOTE: If installing Wood Roof, Penthouse Corner Post (6321) will not be attached to Filler Block (7055).
- 4. Position Monkey Bar Entrapment Board (4066) on Monkey Bar, pushed up tight to Penthouse. Attach Monkey Bar Entrapment Board using 1/4" Hardware (H1) (H97).
- 5. Position Safety Handles (N391) against Penthouse Corner Post (6320) and Center Post (6138), in approximate locations shown, and attach using 5/16" Hardware (H104) (as shown in Inset A).

\*NOTE: If installing Wood Roof, one Safety Handle will be attached to Filler Block (7055) instead of Center Post (6138).



### Penthouse Side Board & Rail Upright Installation

\*NOTE: Installation of Rail Uprights and Penthouse Side Boards will be the same for the

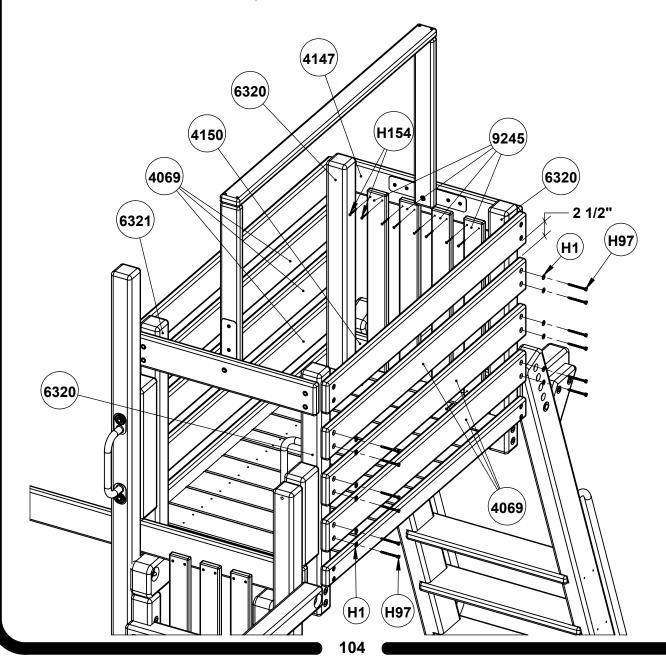
Penthouse with Wood Roof.

\*NOTE: Only install Penthouse Side Boards (4069) on one side of Penthouse if assembling Penthouse with Spiral Slide or Penthouse with Wood Roof and Spiral Slide.

1. Evenly space Penthouse Side Boards (4069) against Penthouse Corner Posts (6320) (6321) and attach using 1/4" Hardware (H9) (H97).

\*NOTE: Spacing between Penthouse Side Boards (4069) should measure approximately 2 1/2".

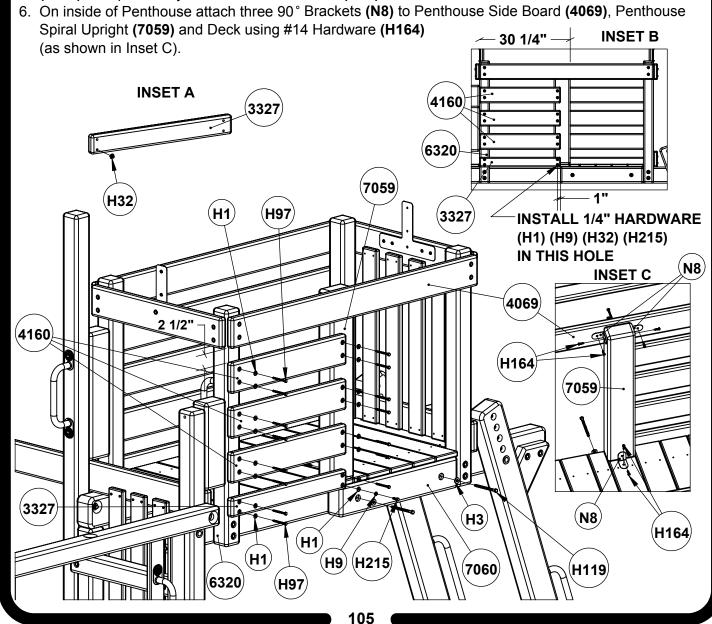
2. Evenly space Penthouse Rail Uprights (9245) (as shown) against Tarp Facia (4147) and Penthouse End Facia (4150) and attach using #8 Hardware (H154).



### Penthouse Side Board Installation (for Spiral Slide)

\*NOTE: Installation processes will be the same for the Wood Roof Version.

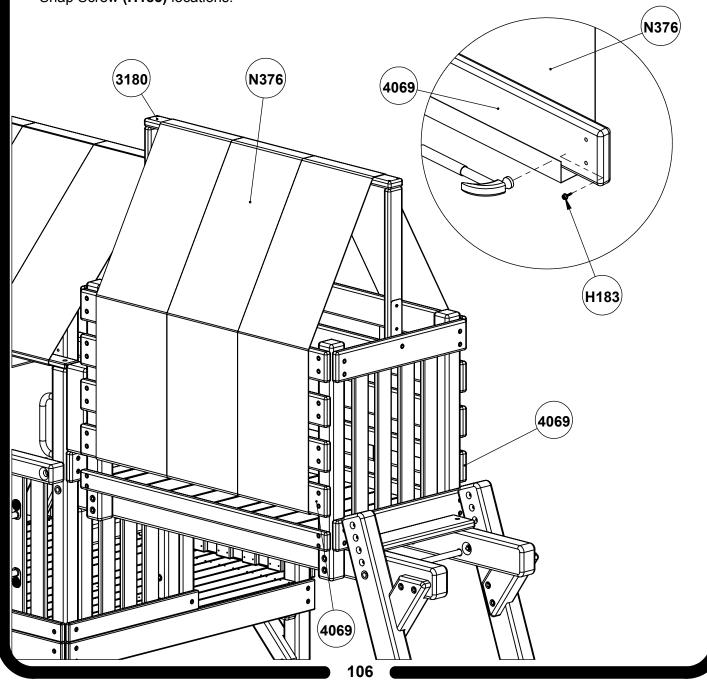
- 1. On the backside of Short Penthouse Side Board, insert 1/4" Hardware (H32) into the bottom hole of the short side offset counter bored holes (as shown in Inset A).
- 2. Position the bottom Penthouse Side Board (3327), flush with the bottoms of Deck Boards, and attach to Penthouse Corner Post (6320) using 1/4" Hardware (H1) (H97).
  - \*NOTE: Holes in the ends of Penthouse Side Boards (3327) (4160) are drilled at different distances. Be sure that Side Boards are oriented as shown in Inset B.
- Equally space and attach Short Penthouse Side Boards (4160) using 1/4" Hardware (H1) (H97).
   Spacing between remaining Side Boards will be approximately 2 1/2".
- 4. Position Penthouse Spiral Upright (7059) on Deck and attach through Penthouse Side Boards (3327) (4160) using 1/4" Hardware (H1) (H97).
  - \*NOTE: Penthouse Upright (7059) will measure 30 1/4" from Penthouse Corner Post (6320) when properly installed.
- 5. Install 1/4" Hardware (H1) (H9) (H215) through bottom hole of the bottom Penthouse Side Board (3327), into previously installed 1/4" Hardware (H32).



### Penthouse Tarp Installation

\*NOTE: Skip to next step if installing Penthouse with Spiral Slide. Skip to Step 66 if installing Penthouse with Wood Roof.

- 1. Evenly spread Penthouse Tarp (N376) over the top of Tarp Board (3180) and Penthouse Side Boards (4069) with the Snaps against the inside.
- 2. Wrap Tarp (N376) around the bottom side of Penthouse Side Boards (4069). Starting with the middle tarp snap, gently tap each snap with a hammer to leave an indentation in the wood (as shown in Inset A).
- 3. Install snap screws (H183) in the center of the indentations. Snap Screws (H183) are rolled up in the Penthouse Tarp (N376).
- 4. Snap the Penthouse Tarp (N376) to the Snap Screws (H183).
- 5. Repeat parts 2, 3 and 4 for the other side. Penthouse Tarp should be pulled tight when marking Snap Screw (H183) locations.



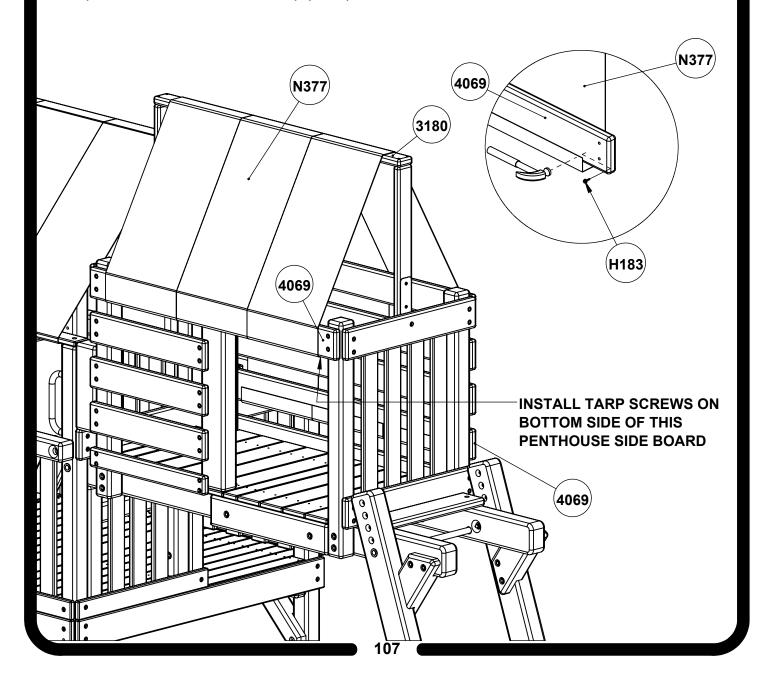
#### Penthouse with Spiral Slide Tarp Installation

\*NOTE: Skip to next Step if installing Penthouse with Wood Roof.

- 1. Spread Penthouse Tarp (N377) over the top of Tarp Board (3180) and Penthouse Side Boards (4069) with the Snaps against the inside.
- 2. Wrap Tarp (N377) around the bottom side of the bottom Penthouse Side Board (4069) on the side of the Penthouse with the Spiral Opening. Starting with the middle tarp snap, gently tap each snap with a hammer to leave an indentation in the wood (as shown in Inset A).

\*NOTE: Tarp Snaps (H183) must be installed on the bottom edge of Penthouse Side Board.

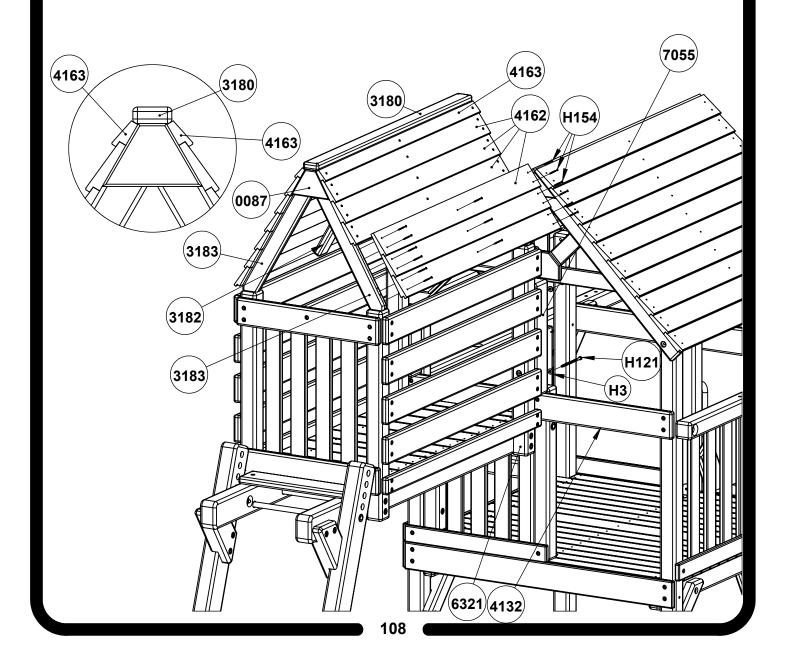
- 3. Install snap screws (H183) in the center of the indentations. Snap Screws (H183) are rolled up in the Penthouse Tarp (N377).
- 4. Snap the Penthouse Tarp (N377) to the Snap Screws (H183).
- 5. Pull the tarp tight around the other side of the Penthouses and wrap the tarp around the bottom Penthouse Side Board (4069).
- 6. Repeat #'s 2-4 for other side of Tarp (N377).



### Penthouse Wood Roof Installation

\*NOTE: Wood Roof installation is the same for Penthouses with and without Spiral Slide.

- 1. Position first Roof Board (4163) on Penthouse Roof Supports (3183), pushed up to and flush with ends of Tarp Board (3180) (as shown in Inset A). Attach Roof Board (4163) using #8 Hardware (H154).
- 2. Continue attaching Roof Boards (4162) to Penthouse Roof Supports (3183) using #8 Hardware (H154), making sure Roof Boards (4162) stay flush with the top two Roof Boards (4163).
- 3. After Attaching Roof Boards (4162), center Penthouse Wood Roof Runner (3182) on underside of Roof Boards (4162) (4163) and attach using #8 Hardware (H154).
- 4. Position Filler Block (7055) against Penthouse Corner Post (6321), directly on top of 6 Hole Facia (4132) and attach using 3/8" Hardware (H3) (H121).



### Rainbow Exclusive Lifetime Warranty

Rainbow Play Systems, Inc. warrants to the original purchaser that their Rainbow® Play System will be free from defects in material and workmanship for the following time periods:

LIFETIME WARRANTY Rainbow guarantees all Cedar lumber components against structural failure for the lifetime of the unit. Seasonal checking, surface cracks, knot holes and knots are natural characteristics of Cedar lumber and are not covered under our warranty.

LIFETIME WARRANTY Rainbow guarantees all scoop slides, tube slides, crawl tunnels, crow's nests, panel mounts, commercial swing hangers, the Rainbow® plaque, 360° tire swivels, structural hardware, Plastisol coated plates, Plastisol coated brackets, Plastisol coated rungs, Trapeze/Triangles and Plastisol coated handles for the lifetime of the unit. Cosmetic cracks and color fading of our plastic components are not covered under our warranty. Surface rust on structural hardware and metal components is not covered under this warranty.

FIVE YEAR WARRANTY Rainbow guarantees all tarps, ship's wheel, rope disc, binoculars, telescope, periscope, megaphone, bubble window, chalkboard, flag dowels, gliders, buoy balls, tic-tac-toe panel, driving panel, talk tube, ship anchor, ship shelf, ship lock, wave slide, tire swing, swing seat, commercial full bucket swing, half bucket swing, flat swing, rock wall rocks, punching bag, solar lights, and swinging tent will be covered by our five year warranty. Cosmetic cracks and color fading of our plastic components are not covered under our warranty.

FIVE YEAR WARRANTY Rainbow guarantees chain ladder, chain, powder coated chin-up bar, fireman's pole, bell, powder coated rungs, powder coated handles, powder coated brackets, powder coated plates, and powder coated corkscrew climber will be covered by our five year warranty. Surface rust on structural hardware and metal components is not covered under this warranty.

ONE YEAR WARRANTY Ropes and Flags are covered by our one year warranty.

Rainbow's Exclusive Lifetime Warranty, Five Year Warranty, and One Year Warranty is non-transferable.

This warranty is nullified if a residential unit is utilized in a commercial playground setting, a commercial environment or any commercial playground application. Rainbow Play Village Commercial Playground Equipment are covered under this warranty in commercial playground applications.

Rainbow can nullify this warranty if the unit has been subjected to vandalism, negligent or improper installation, failure to properly maintain the unit with periodic staining of wood and tightening of hardware, unit being subjected to an irrigation system, unauthorized alteration, improper use, or Acts of God.

Your sales receipt will be needed to make a warranty claim. Rainbow will ask you for photos for your warranty claim. Warranty claims will be repaired or replaced as determined by Rainbow. Shipping and labor costs are not covered under this warranty.

#### TO THE MAXIMUM EXTENT PERMITTED BY LAW:

NO OTHER WARRANTY, EXPRESSED OR IMPLIED CAN REPLACE THIS WARRANTY. THIS WARRANTY IS DIRECTLY FROM RAINBOW PLAY SYSTEMS, INC. TO THE ORIGINAL PURCHASER. NO OTHER WARRANTY OF MERCHANTABILITY OR FITNESS FOR USE, EXPRESSED OR IMPLIED CAN REPLACE THIS WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS. RAINBOW DOES NOT AUTHORIZE ANY PERSON OR ENTITY TO OFFER ANY OTHER WARRANTIES FOR RAINBOW.

Rainbow assumes no responsibility for incidental or consequential damages which may arise from the purchase or use of the unit. Some states do not allow exclusion or limitation of incidental or consequential damages. This warranty provides you with legal rights, which vary from state to state.

Please register your Rainbow® online at http://register.rainbowplay.com to verify your original ownership of your Rainbow Play System.