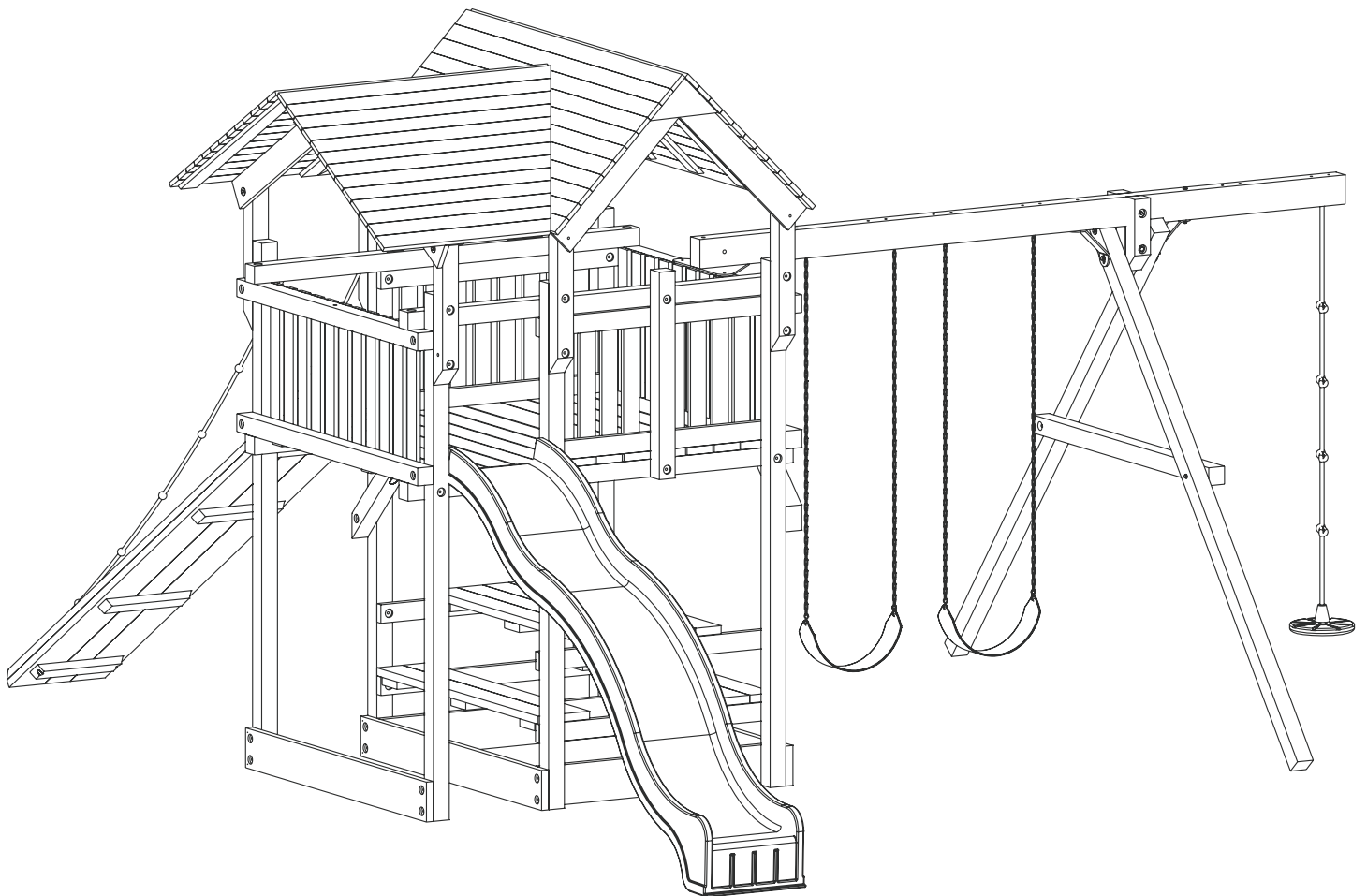


PLAYHOUSE OPEN



woodplay

ASSEMBLY INSTRUCTIONS FOR PLAYHOUSE OPEN



woodplay

2101 Harrod Street • Raleigh, NC 27604 • 1-800-WOODPLAY • (800-966-3752) • Fax 919/875-4264

H A R D W A R E I D E N T I F I C A T I O N

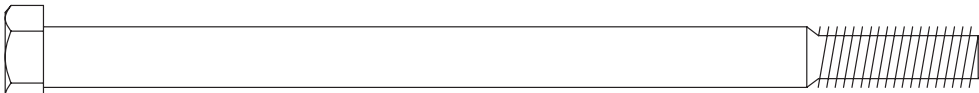
NOTE: All items shown may not be required for your playset.



MB6 (1/2" X 12" Machine Bolt)



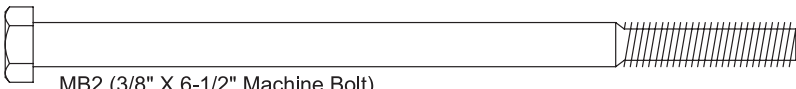
MB5 (1/2" X 10" Machine Bolt)



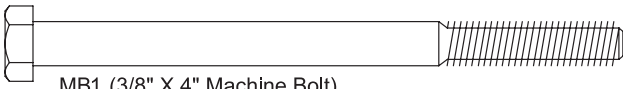
MB4 (1/2" X 8" Machine Bolt)



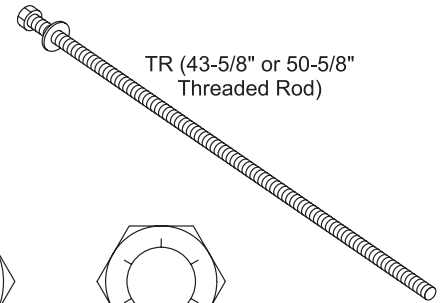
MB3 (3/8" X 7-1/2" Machine Bolt)



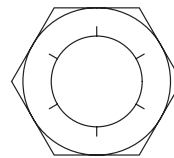
MB2 (3/8" X 6-1/2" Machine Bolt)



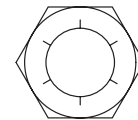
MB1 (3/8" X 4" Machine Bolt)



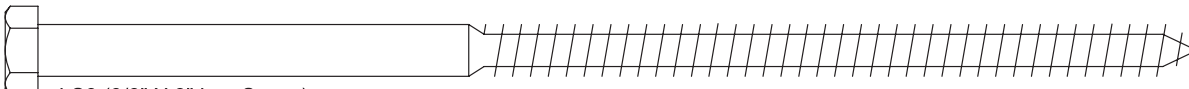
TR (43-5/8" or 50-5/8" Threaded Rod)



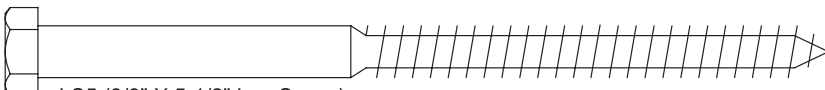
SN2 (1/2" Loc Nut)



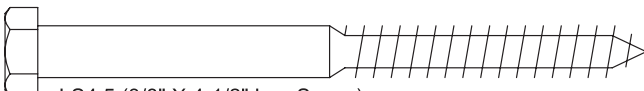
SN1 (3/8" Loc Nut)



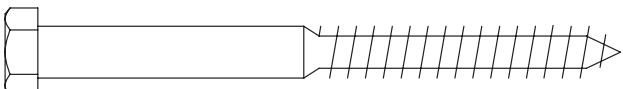
LS8 (3/8" X 8" Lag Screw)



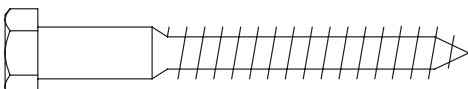
LS5 (3/8" X 5-1/2" Lag Screw)



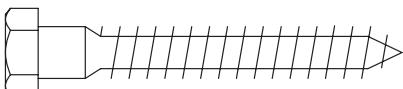
LS4.5 (3/8" X 4-1/2" Lag Screw)



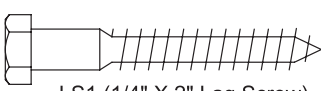
LS4 (3/8" X 4" Lag Screw)



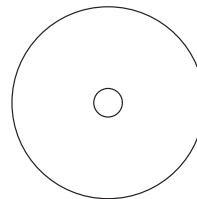
LS3 (3/8" X 3" Lag Screw)



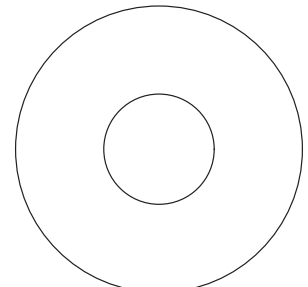
LS2 (3/8" X 2-1/2" Lag Screw)



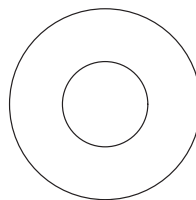
LS1 (1/4" X 2" Lag Screw)



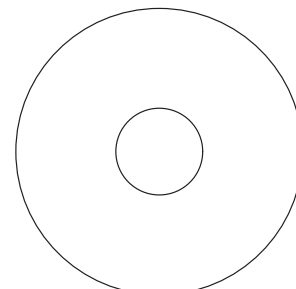
FW6 (7/32" Fender Washer)



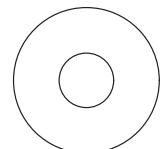
FW4 (1/2" Std. Washer)



FW2 (3/8" Std. Washer)



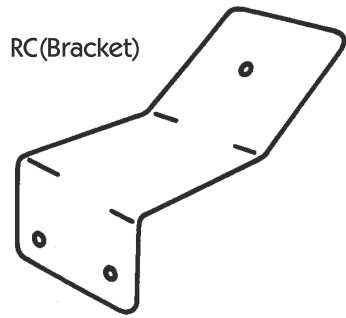
FW3 (3/8" X 1-1/2" Fender Washer)



FW1 (1/4" Std. Washer)

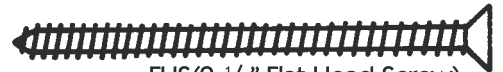
NOTE TO INSTALLER

**You must assemble this product in accordance with these Assembly Instructions.
After assembly is complete, please give this Owner's Manual to the owner of the plays system.**



RC(Bracket)

Tools Needed:
Hammer
Carpenter's Level
Tape Measure
Phillips Screwdriver
3/8" Drive Ratchet
7/16" Socket
9/16" Socket
3/4" Socket
Drill & 3/8" Bit
A Friend or Neighbor



FHS(2 1/2" Flat Head Screw)



PHS(2 1/2" Phillips Head Screw)

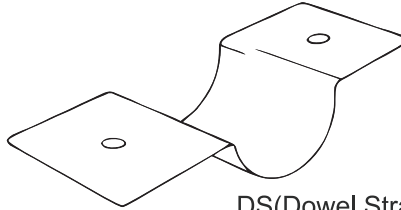
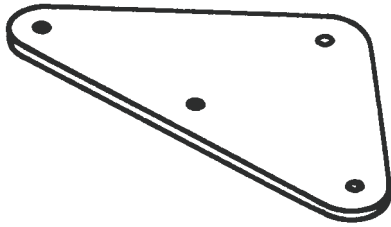


PHS(1" Phillips Head Screw)

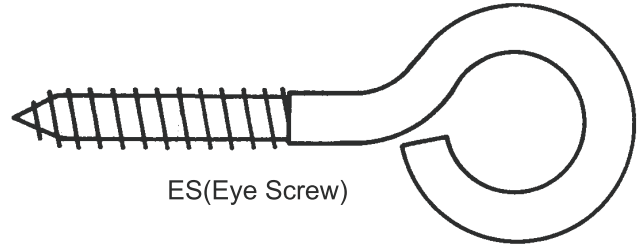


PHS(3/4" Phillips Head Screw)

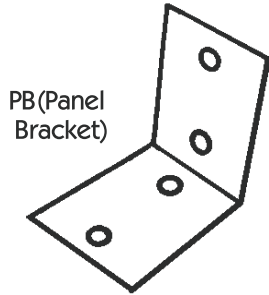
PL(Steel Triangle Plate)



DS(Dowel Strap)

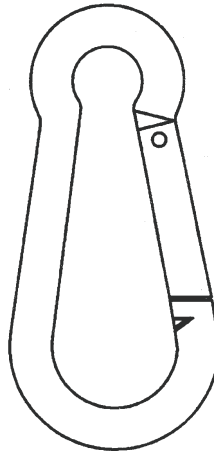


ES(Eye Screw)



PB(Panel Bracket)

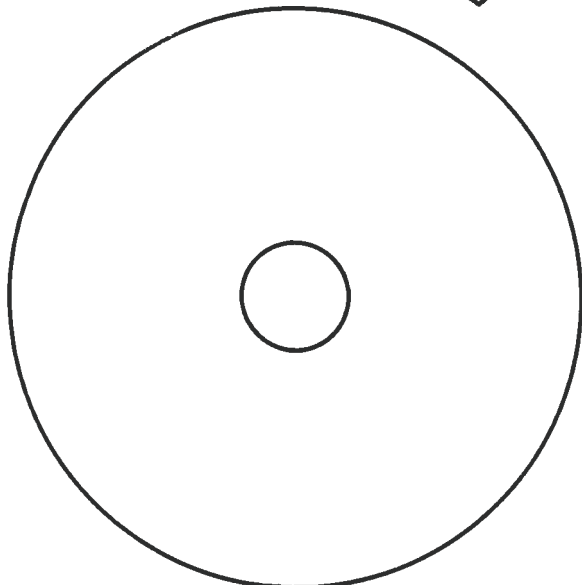
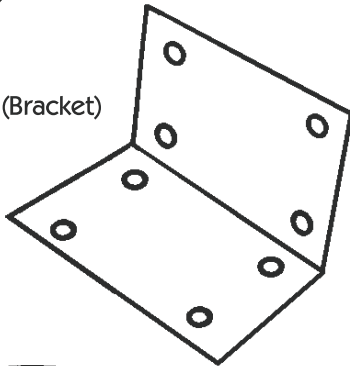
CL(Spring Clip)



SH(Standard Swing Hanger)

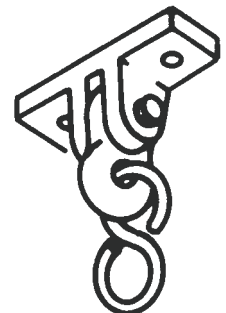


RB(Bracket)



FW5(1/2" Fender Washer)

DH(Ductile Swing Hanger)



BR(Steel Support Brace)



STANDARD PARTS LIST

NOTE: Some options (eg. Overhead Climber) are shown in addendum sheets.

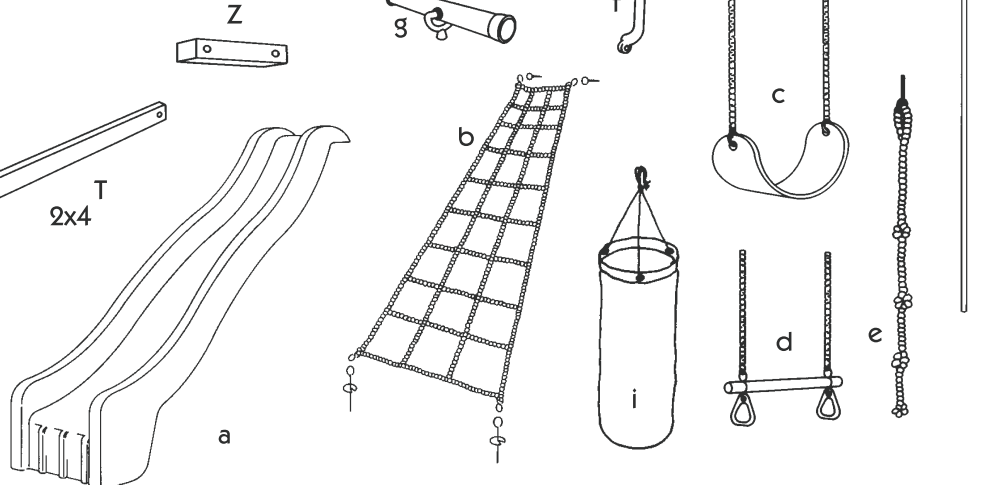
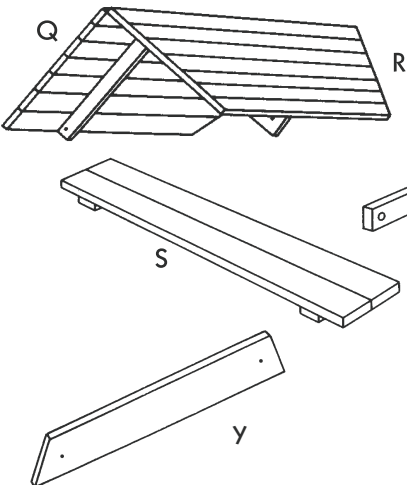
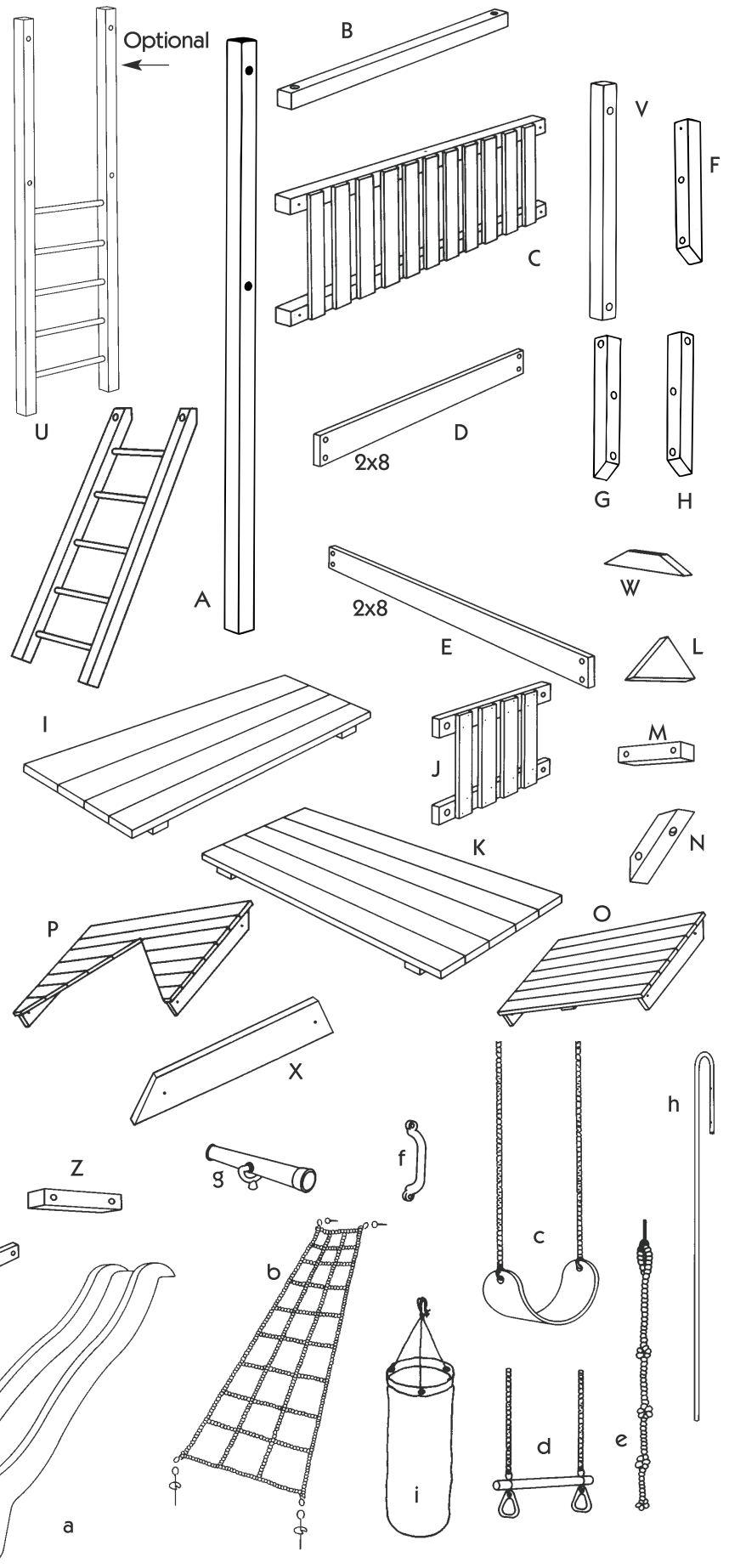
ITEM	DESCRIPTION	QUANTITY
A	99" Corner Post	(6)
B	82 3/8" Rail/Frame	(4)
C	67" Safety Panel	(2)
D	50 3/4" Sandbox Side	(2)
E	67" Sandbox Side	(3)
F	28" Corner Roof Support	(4)
G	28" Roof Support (left)	(1)
H	28" Roof Support (Right)	(1)
I	60" Deck	(3)
J	Safety Panel** (size will vary)	(1)
K	Picnic Table*	(1)
L	14" Triangle Connector	(2)
M	16" Slide Block	(1)
N	22" Corner Brace	(4)
O	80" Roof Half	(1)
P	80" Roof Half w/V cut	(1)
Q	Gable Roof (left)	(1)
R	Gable Roof (right)	(1)
S	Picnic Bench*	(2)
T	2x4 Support for Picnic*	(4)
U	78 1/2" Incline Ladder	(1)
V	39" Safety Rail Support	(2)
W	Triangle for Gable Roof	(1)
X	38" Rafter/45 Degree Angle	(4)
Y	46" Rafter/30 Degree Angle	(2)
Z	20" Ladder Spacer	(1)

ACCESSORIES (if included)

a	Slide	(1)
b	Cargo Net / Eye Screw	(1)
c	Belt Seat Swing	(2)
d	Trapeze	(1)
e	Knotted Rope Climb	(1)
f	Plastic Safety Handle	(2)
g	Telescope	(1)
h	Firepole	(1)
i	Bonker Bag	(1)

* If Purchased

**Quantity and sizes will vary based on options Purchased.



I N T R O D U C T I O N

Welcome to our family of ready-to-build backyard play equipment. WOODPLAY playsets are designed with ease of assembly in mind and we provide these step-by-step installation instructions.

After reading the information below, locate your structure site and carefully unpack parts. As you unpack your playset, keep the parts identification sheet 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 you avoid mistakes and save you time later.**

Choosing A Location For Your Playset

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

A. The playset should be located on level ground. The stationary components such as ladders and slides are **REQUIRED** to be a minimum of six feet from any structure or obstruction such as a fence, garage, house, tree or overhanging branches, electrical wires or clotheslines. Any swinging equipment is also **REQUIRED** to be a minimum distance twice the height of the swing beam away from these obstructions or structures as well. We also recommend that you do not install your playset near a lake, river, swimming pool or other water hazard.

B. The U.S. Consumer Product Safety Commission (CPSC) recommends that you install and maintain a resilient surface under your play equipment. The CPSC's Consumer Information Sheet for Playground Surfacing Materials is on the last page. A resilient surface, should be installed after the equipment has been completely assembled according to these instructions. The equipment must rest on solid ground. Please note that this product has a maximum fall height of 8'.

Do not install home playground equipment indoors, or over concrete, asphalt, packed earth, grass, carpet or any other hard surface. A fall onto a hard surface can result in serious or fatal injury.

Responsible on-site adult supervision is one of the most important contributions to children's safety that you can make. WOODPLAY strongly recommends on-site adult supervision of children of all ages. Safe swinging and climbing skills need to be taught to children, just like any other physical activity.

The weight limit for any single user on WOODPLAY equipment is 200 pounds. Limit the number of users to one on each swing. The tower portion of the play system will accommodate four (4) additional users.

When the time comes to disassemble and dispose of the play equipment, do so in such a way that no hazards will exist at the time the equipment is discarded.

Maintaining Your Playset

Here are some maintenance tips required to insure safe enjoyment of your equipment for years to come.

A. At the beginning of each usage season and every two weeks during, check: nuts and bolts and tighten as needed, swing seats, chains, ladders, slides, rope and wood components for signs of deterioration and replace if necessary.

B. On a yearly basis, we recommend that you coat your playset with a sealant or preservative. You may also want to spot sand any areas prior to sealing. Be sure that the sealant you select is non-toxic and child safe. Your local WOODPLAY dealer may offer a complete sealant and maintenance program.

C. Do not use line trimmers or "weed eaters" around your play equipment. The line will remove both paint and wood from uprights and base pieces. Any damage resulting from this type of abuse is not covered under our limited warranty.

D. Remove plastic swing seats and take indoors or do not use when the temperature drops below 0° F.

If you have any questions about your playset, or are in need of replacement parts, contact your local WOODPLAY Representative. Please keep these instructions for future reference.

SAFETY INSTRUCTIONS

Teach Children:

- Not to walk close to, in front of, behind, or between moving items.
- Not to twist the swing ropes, or loop them over the top support bar, since this may reduce the strength of the rope.
- Not to swing empty swing seats.
- Not to swing sideways into the path of adjacent swings.
- Not to use the equipment in a manner other than that for which it is intended.
- Not to get off the equipment while it is in motion.
- Not to jump off the tower.
- Not to climb or swing when they are wet or when the equipment is wet.
- To sit in the center of the swings with their full weight on the seats.
- To hold on to swings and climbers with both hands.
- Not to stand in the swing seats.
- Not to ride or leave bicycles or other toys in the swing area.
- Not to use hammers, saws, nails, or wrenches on the equipment.
- Not to swing so high that chains become slack, or above the height of the swing support.
- Not to jump on a slide.
- Not to climb on top of the swing support.
- Not to attach to the playground equipment any item that is not specifically designed for use with the equipment, such as (but not limited to) jump ropes, clotheslines, pet leashes, cables, and chains. These may become strangulation hazards.
- To slide feet first, never head first.
- To watch for other children while swinging or playing near the equipment.

In Addition, Adults Must:

- Limit climbing and swinging heights to each child's ability.
- Verify that suspended climbing ropes are secured at both ends.
- Verify that suspended climbing ropes cannot be looped back on themselves.
- Dress children appropriately for play. Use well-fitting Shoes that do not have slippery soles.
- Avoid ponchos, scarves, hoods, loose-fitting clothing, neckties, and any clothing with a drawstring. Serious injury could result should any part of the children's clothing become entangled in the equipment.
- Do not allow children to play wearing helmets.
- Remember that children are inventive. When they develop games that are unsafe, be alert and change the rules.

STEP 1: ASSEMBLE PARTS A AND B

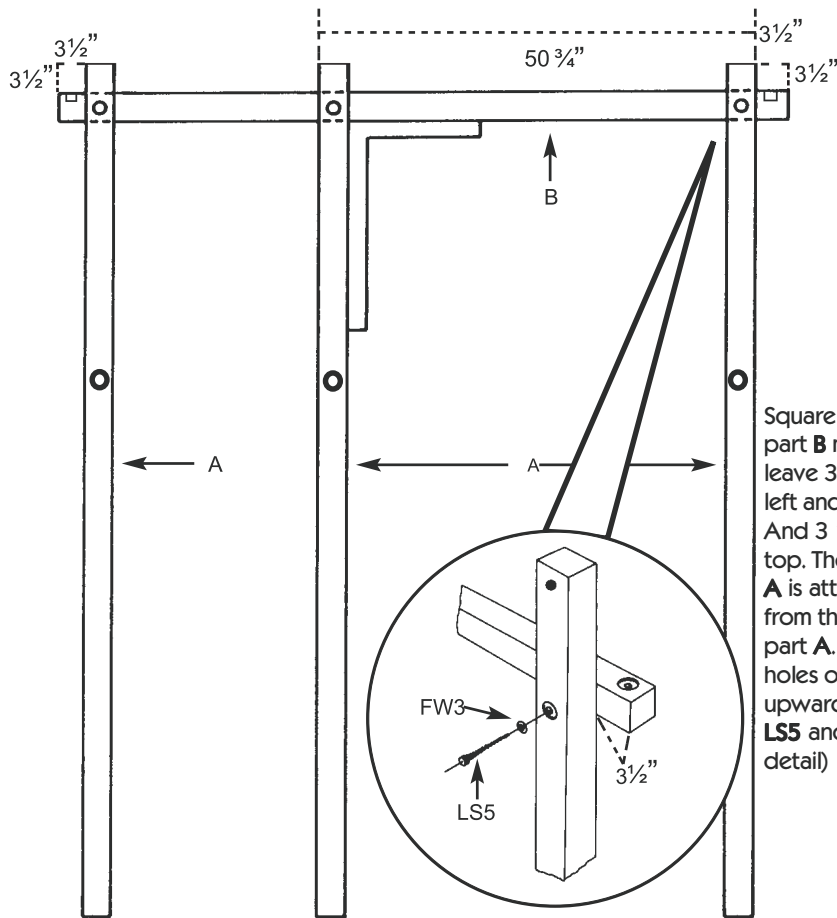
1

PARTS NEEDED:

- (3) A (99" Corner post)
- (1) B (82 3/8" Rail)

HARDWARE NEEDED:

- (3) LS5 (3/8" x 5 1/2" Lag Screw)
- (3) FW3 (3/8" Fender Washer)



Square parts **A** with part **B** making sure to leave 3 1/2" on the left and right sides And 3 1/2" at the top. The middle part **A** is attached 50 3/4" from the right side part **A**. Countersink holes on part **B** face upward. Attach using **LS5** and **FW3**. (see detail)

Front View

STEP 2: ADD ANOTHER PART B TO STEP 1 ASSEMBLY

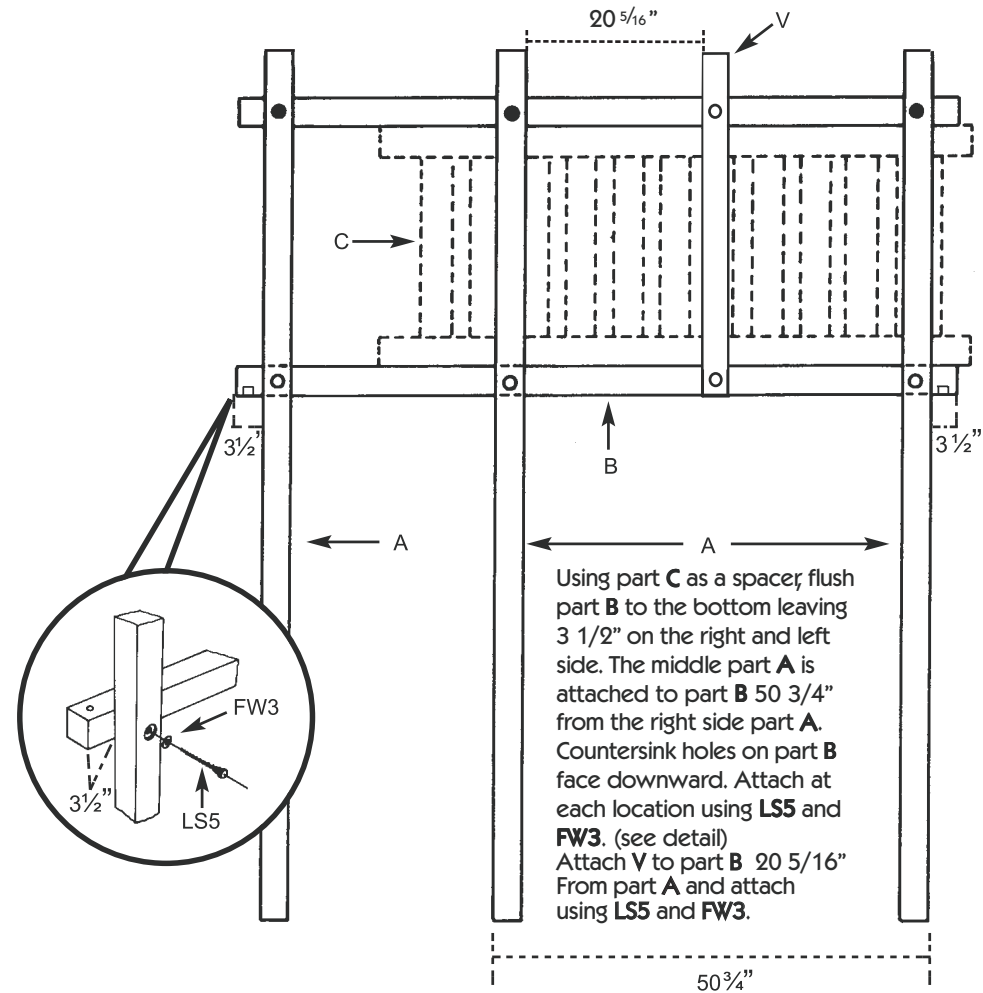
2

PARTS NEEDED:

- (1) B (82 3/8" Rail)
- (1) C (67" Safety panel)
- (1) V (39" Safety rail support)

HARDWARE NEEDED:

- (5) LS5 (3/8" x 5 1/2" Lag Screw)
- (5) FW3 (3/8" Fender Washer)



Using part **C** as a spacer, flush part **B** to the bottom leaving 3 1/2" on the right and left side. The middle part **A** is attached to part **B** 50 3/4" from the right side part **A**. Countersink holes on part **B** face downward. Attach at each location using **LS5** and **FW3**. (see detail)
Attach **V** to part **B** 20 5/16" from part **A** and attach using **LS5** and **FW3**.

Front View

STEP 3: ADD PART D TO STEP 2 ASSEMBLY

3

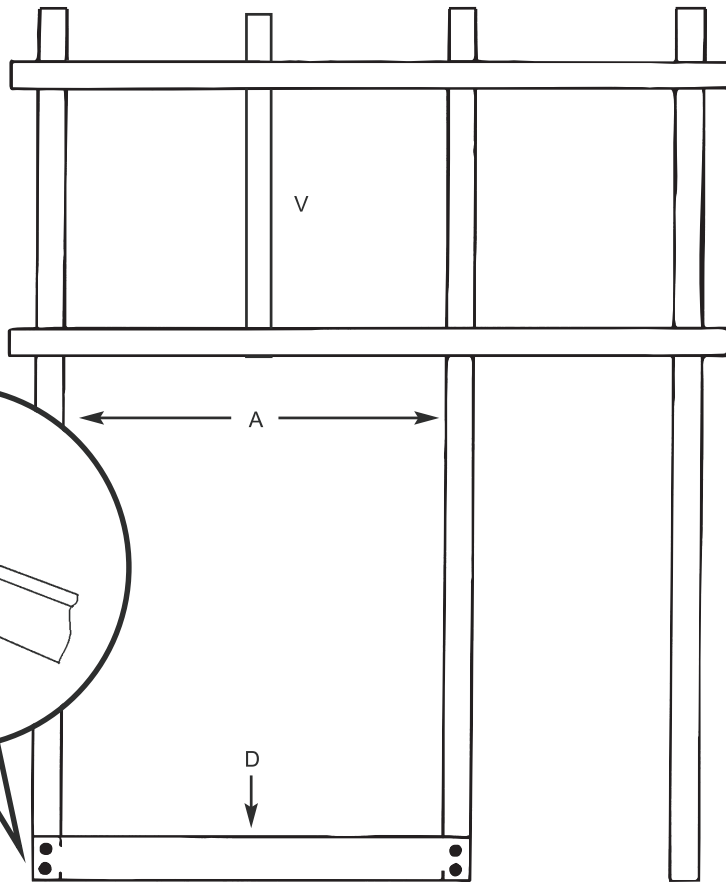
PARTS NEEDED:

(1) D (50 3/4" Sandbox side)

HARDWARE NEEDED:

(4) LS2 (3/8" x 2 1/2" Lag Screw)
(4) FW3 (3/8" Fender Washer)

Flip assembly over and attach part **D** flush to the bottom and sides of parts **B** using **LS2** and **FW3**. (see detail)



Rear View

STEP 4: ATTACH PARTS F AND H

4

PARTS NEEDED:

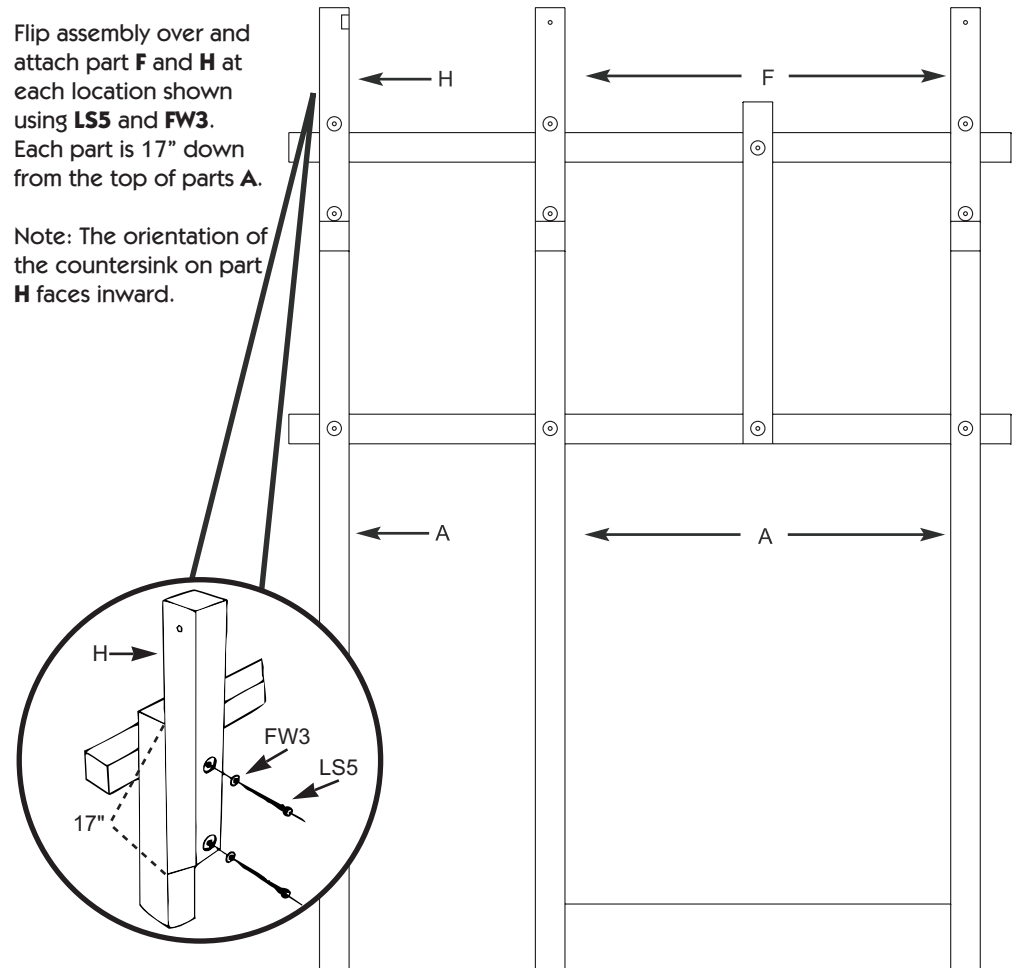
(2) F (28" Corner Roof Support)
(1) H (28" Corner Roof Support-right)

HARDWARE NEEDED:

(6) LS5 (3/8" x 5 1/2" Lag Screw)
(6) FW3 (3/8" Fender Washer)

Flip assembly over and attach part **F** and **H** at each location shown using **LS5** and **FW3**. Each part is 17" down from the top of parts **A**.

Note: The orientation of the countersink on part **H** faces inward.



Front View

STEP 5: ASSEMBLE PARTS A AND B

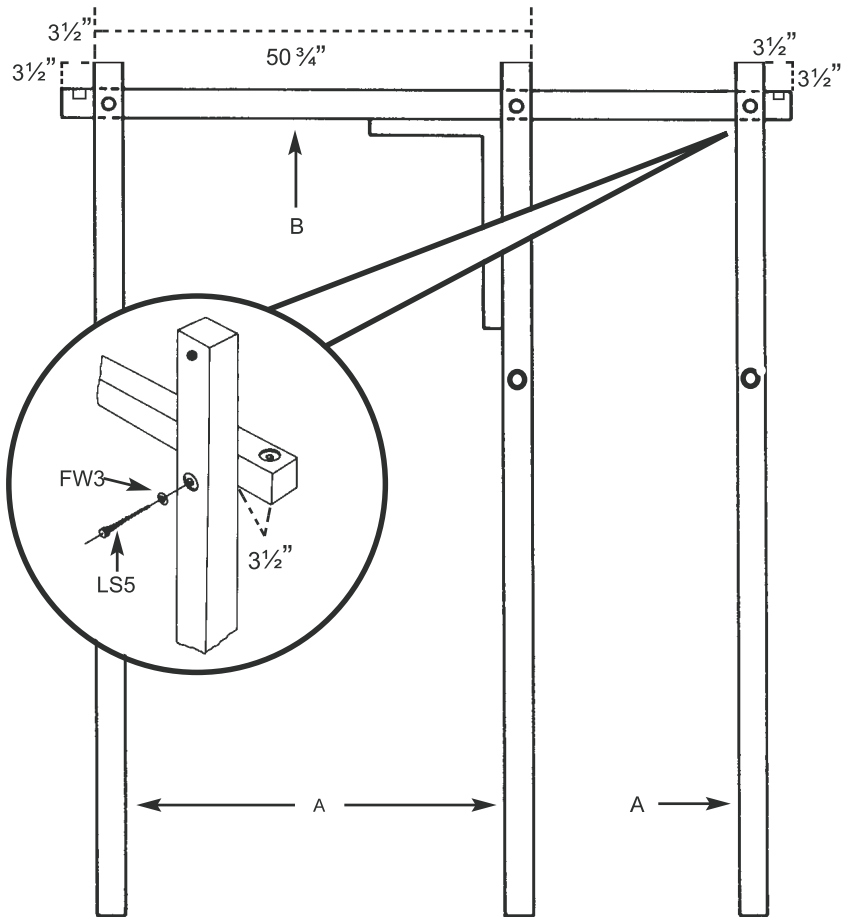
5

PARTS NEEDED:

- (3) A (99" Corner Post)
- (1) B (82 3/8" Rail)

HARDWARE NEEDED:

- (3) LS5 (3/8" x 5 1/2" Lag Screw)
- (3) FW3 (3/8" Fender Washer)



Repeat process from STEP 1.

Front View

NOTE: The orientation of countersink on part **B** faces upward.

STEP 6: ADD ANOTHER PART B TO STEP 5

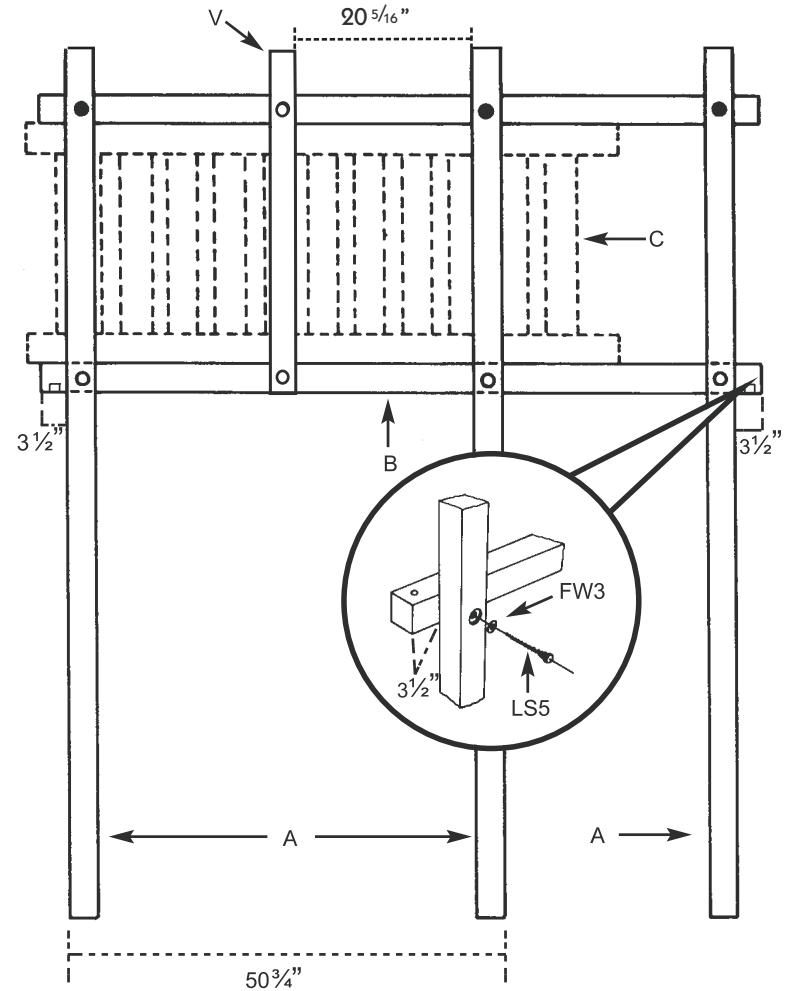
6

PARTS NEEDED:

- (1) B (82 3/8" Rail)
- (1) C (67" Safety Panel)

HARDWARE NEEDED:

- (3) LS5 (3/8" x 5 1/2" Lag Screw)
- (3) FW3 (3/8" Fender Washer)



Repeat process from STEP 1.

NOTE: The orientation of countersink on part **B** faces downward.

STEP 7: ADD PART D TO STEP 6 ASSEMBLY

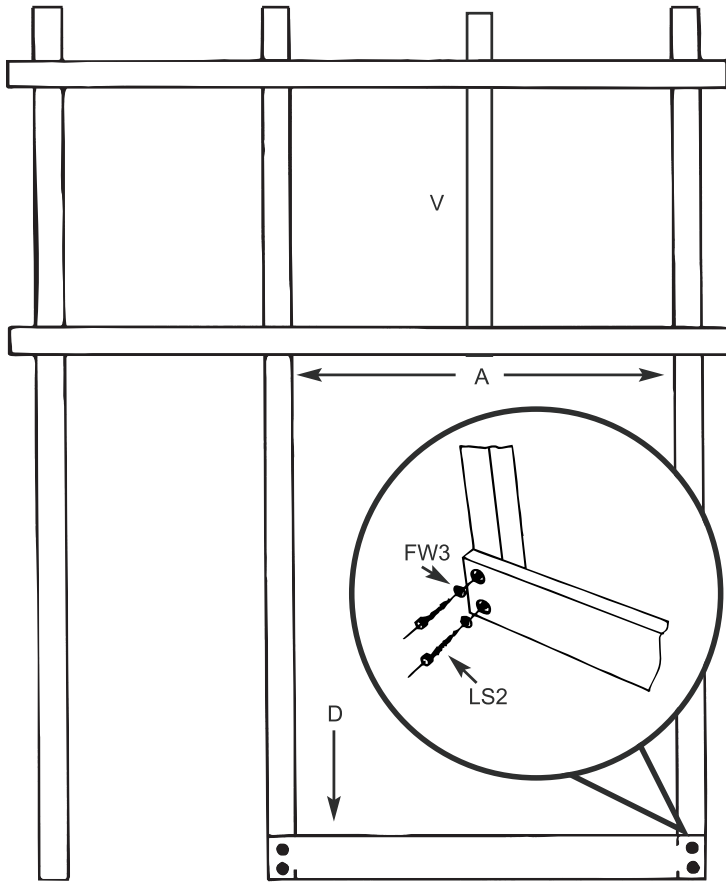
7

PARTS NEEDED:

(1) D (50 3/4" Sandbox Side)

HARDWARE NEEDED:

(4) LS2 (3/8" x 2 1/2" Lag Screw)
 (4) FW3 (3/8" Fender Washer)



Flip assembly over and repeat process from STEP 3.

STEP 8: ATTACH PARTS F AND G

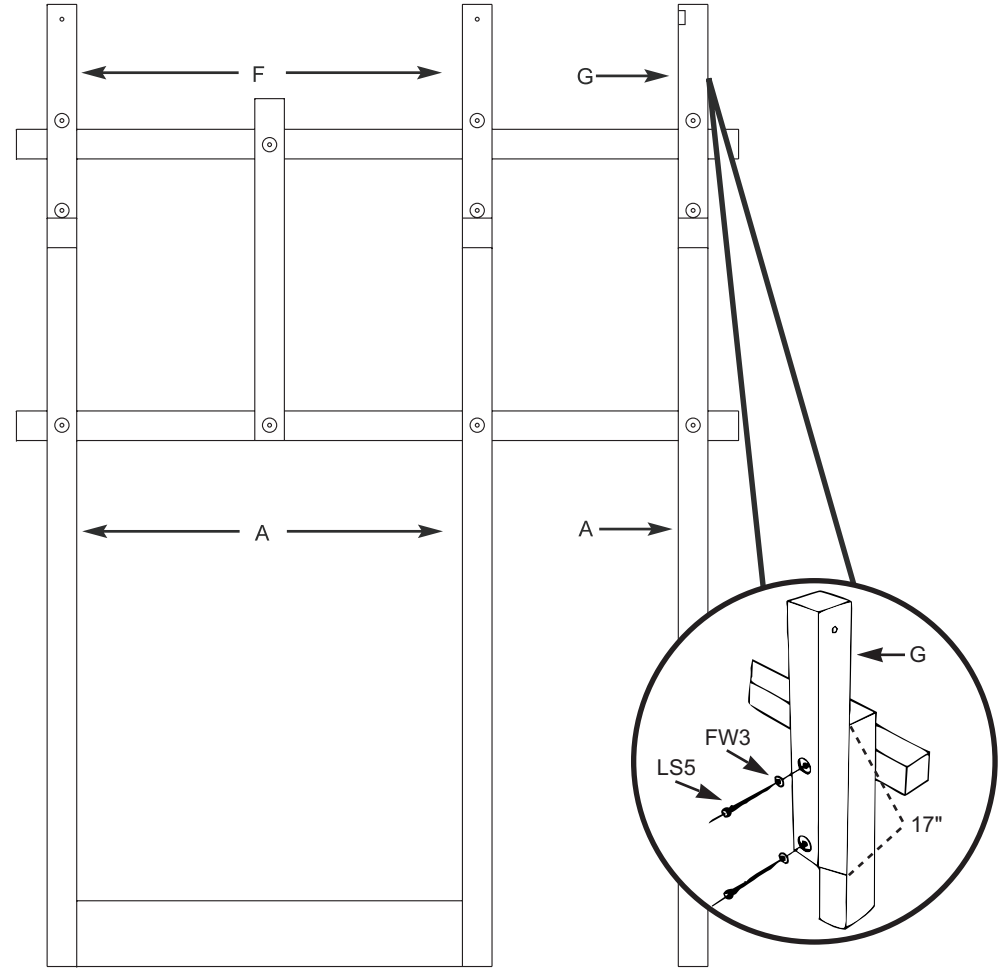
8

PARTS NEEDED:

(2) F (28" Corner roof Support)
 (1) G (28" Roof Support -left)

HARDWARE NEEDED:

(6) LS5 (3/8" x 5 1/2" Lag Screw)
 (6) FW3 (3/8" Fender Washer)



Front View

Repeat process from STEP 4.

NOTE: The orientation of counter-sink on part **G** faces inward.

STEP 9: CONNECT THE TWO ASSEMBLIES USING PARTS C AND E

9

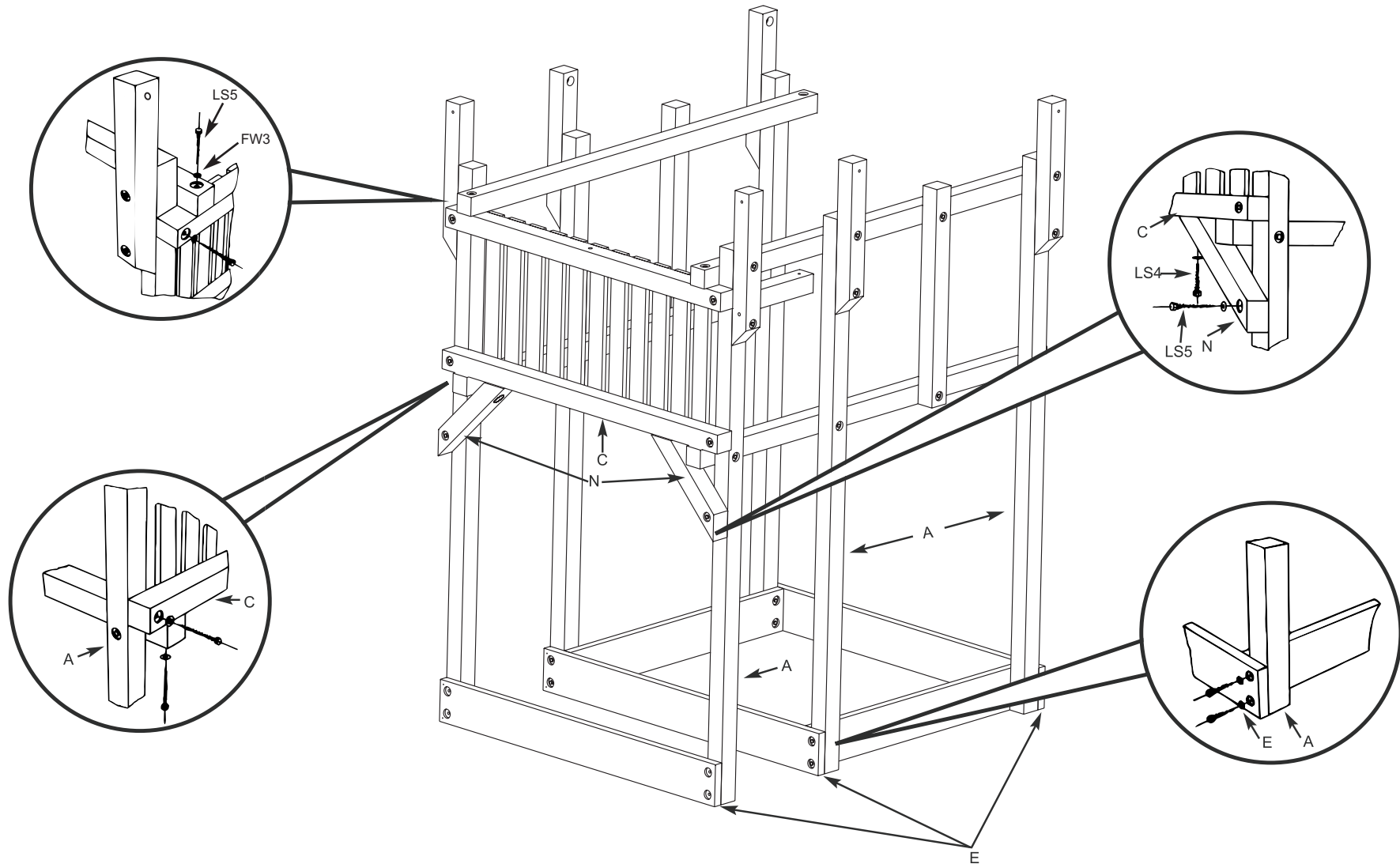
PARTS NEEDED:

- (1) C (67" Safety panel)
- (3) E (67" Sandbox Side)
- (2) N (22" Corner Brace)

HARDWARE NEEDED:

- (10) LS5 (3/8" x 5 1/2" Lag Screw)
- (12) LS2 (3/8" x 2 1/2" Lag Screw)
- (2) LS4 (3/8" x 4" lag Screw)
- (24) FW3 (3/8" Fender Washer)

With a helper, stand STEP 4 assembly up and attach parts **E** at bottom as shown using **LS2** and **FW3**. Make sure parts **E** are flush to sides and bottom of parts **A**. Repeat process for STEP 8 assembly. Now attach part **C** as shown using **LS5** and **FW3** flushing to side of parts **A**. Attach parts **N** as shown using **LS5**, **LS4** and **FW3**. (see detail)



STEP 10: ADD PARTS T (FOR UNITS WITH PICNIC TABLE ONLY)

10

PARTS NEEDED:

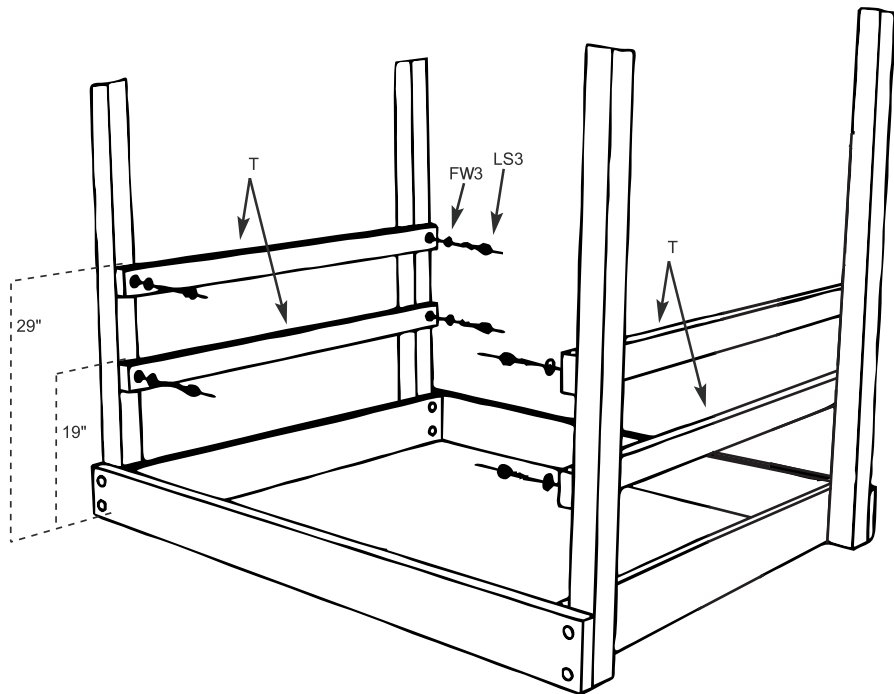
- (4) T (2x4 Support for picnic)
- (1) K (Picnic Table)
- (2) S (Picnic Bench)

HARDWARE NEEDED:

- (8) LS3 (3/8" x 3" Lag Screw)
- (8) FW3 (3/8" Fender Washer)

Attach parts **T** as shown (19" to top of the lower pieces and 29" to top of the upper pieces) using **LS3** and **FW3**.
REPEAT THE PROCESS FOR OPPOSITE SIDE OF UNIT.

Picnic table and benches, parts **K** and **S**, rest on top of parts **T**. They can also be used as a sandbox cover when placed on top of sandbox sides.



STEP 11: ADD PARTS I, J AND M

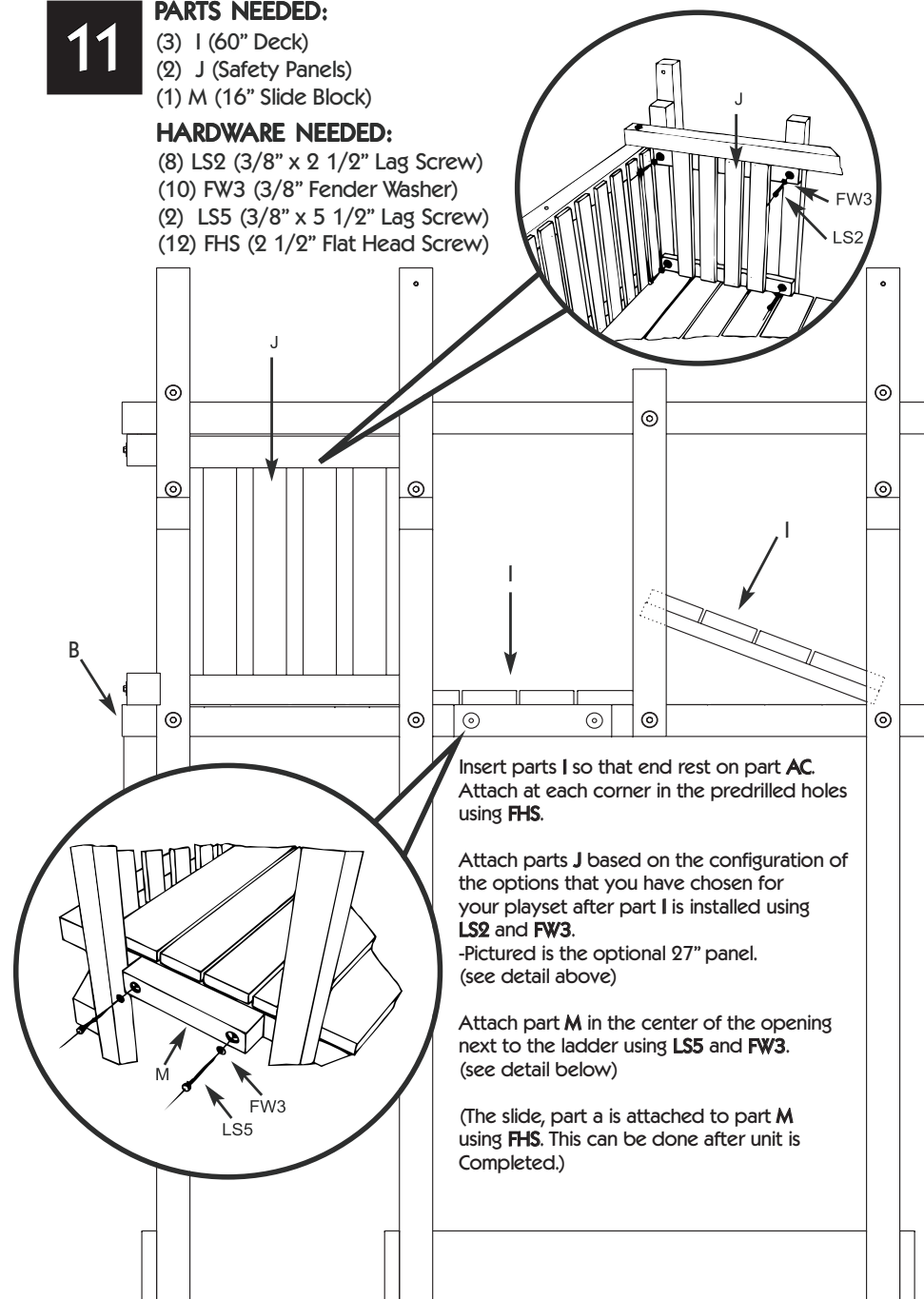
11

PARTS NEEDED:

- (3) I (60" Deck)
- (2) J (Safety Panels)
- (1) M (16" Slide Block)

HARDWARE NEEDED:

- (8) LS2 (3/8" x 2 1/2" Lag Screw)
- (10) FW3 (3/8" Fender Washer)
- (2) LS5 (3/8" x 5 1/2" Lag Screw)
- (12) FHS (2 1/2" Flat Head Screw)



STEP 12: ATTACH RAFTERS X AND Y TO O, P, Q, AND R

12

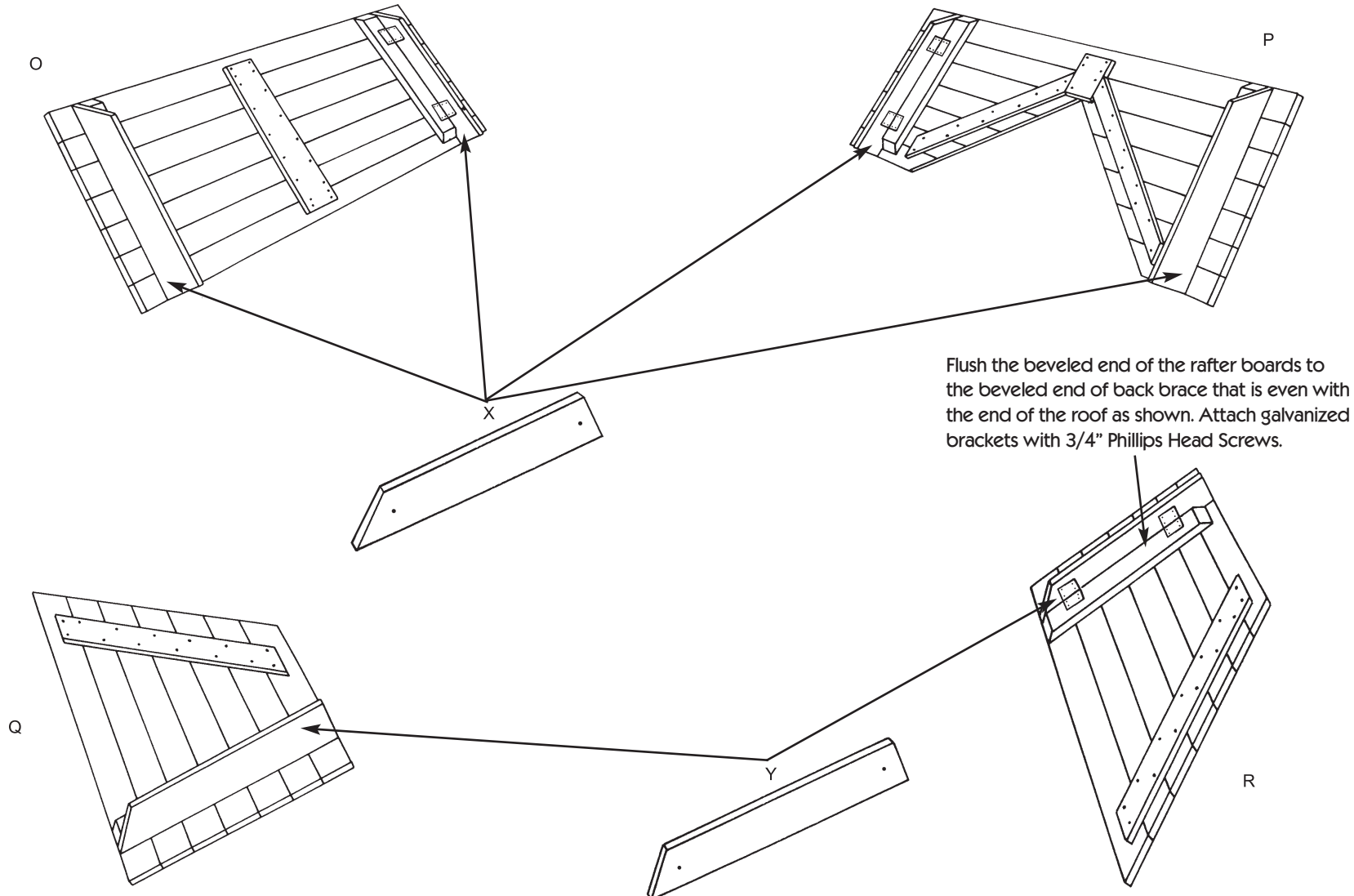
PARTS NEEDED:

- (1) O (80" Roof half)
- (1) P (80" Roof Half w/ V cut)
- (1) Q (Gable Roof- left)
- (1) R (Gable Roof- right)
- (4) X (38" Rafter w/ 45 degree cut)
- (2) Y (46" Rafter w/ 30 degree cut)

HARDWARE NEEDED:

- (12) RB (Right Angle Brackets)
- (96) PHS (3/4" Phillips Head Screws)

Lay a Roof section (**O, P, Q, or R**) on flat ground with the back braces facing up. Attach the rafter, parts **X** or **Y**, at a right angle and flush against the braces as indicated. Flush the beveled end of the rafter to the beveled end of the back brace that is even with the edge of the Roof as shown. Secure each rafter using two **RB** brackets and **PHS**.



STEP 13: ADD PARTS O, P, L, U AND Z

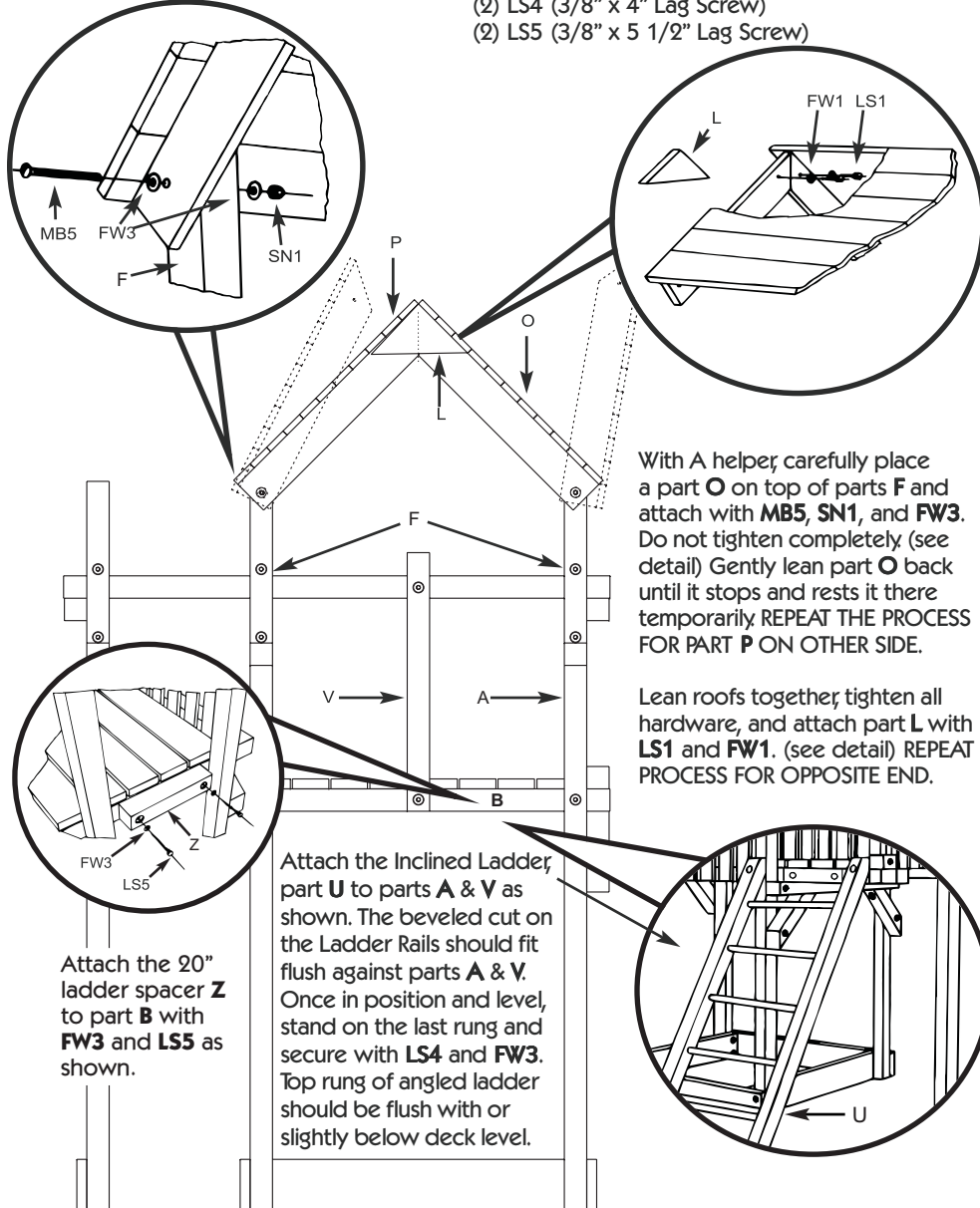
13

PARTS NEEDED:

- (1) O (80" Roof Half)
- (1) P (80" Roof half w/ V cut)
- (2) L (14" Triangle Connector)
- (1) U (78 1/2" Incline ladder)
- (1) Z (20" Ladder Spacer)

HARDWARE NEEDED:

- (4) MB5 (3/8" x 4" Machine Screw)
- (4) SN1 (3/8" Loc Nut)
- (12) FW3 (3/8" Fender Washer)
- (4) LS1 (1/4" x 2" lag Screw)
- (4) FW1 (1/4" Std. Washer)
- (2) LS4 (3/8" x 4" Lag Screw)
- (2) LS5 (3/8" x 5 1/2" Lag Screw)



With A helper, carefully place a part **O** on top of parts **F** and attach with **MB5**, **SN1**, and **FW3**. Do not tighten completely (see detail) Gently lean part **O** back until it stops and rests there temporarily. REPEAT THE PROCESS FOR PART **P** ON OTHER SIDE.

Lean roofs together, tighten all hardware, and attach part **L** with **LS1** and **FW1**. (see detail) REPEAT PROCESS FOR OPPOSITE END.

Attach the Incline Ladder, part **U** to parts **A** & **V** as shown. The beveled cut on the Ladder Rails should fit flush against parts **A** & **V**. Once in position and level, stand on the last rung and secure with **LS4** and **FW3**. Top rung of angled ladder should be flush with or slightly below deck level.

Attach the 20" ladder spacer **Z** to part **B** with **FW3** and **LS5** as shown.

STEP 14: ADD PARTS Q, R AND W

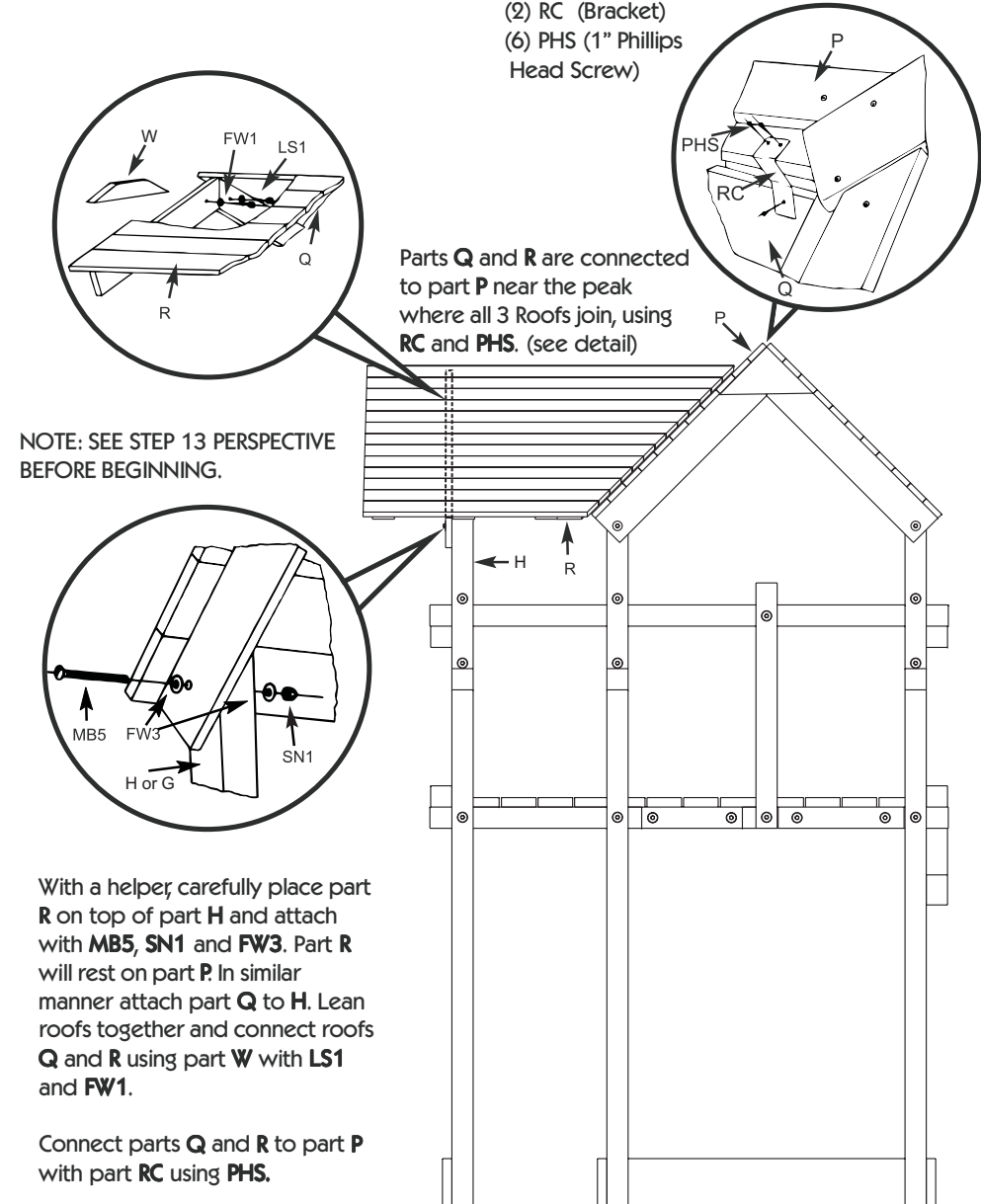
14

PARTS NEEDED:

- (1) Q (Gable Roof-left)
- (1) R (Gable Roof - Right)
- (1) W (Triangle for Gable roof)

HARDWARE NEEDED:

- (2) MB5 (3/8" x 4" Machine bolt)
- (2) SN1 (3/8" Loc Nut)
- (4) FW3 (3/8" Fender Washer)
- (2) LS1 (1/4" x 2" Lag Screw)
- (2) FW1 (1/4" Std. Washer)
- (2) RC (Bracket)
- (6) PHS (1" Phillips Head Screw)



NOTE: SEE STEP 13 PERSPECTIVE BEFORE BEGINNING.

Parts **Q** and **R** are connected to part **P** near the peak where all 3 Roofs join, using **RC** and **PHS**. (see detail)

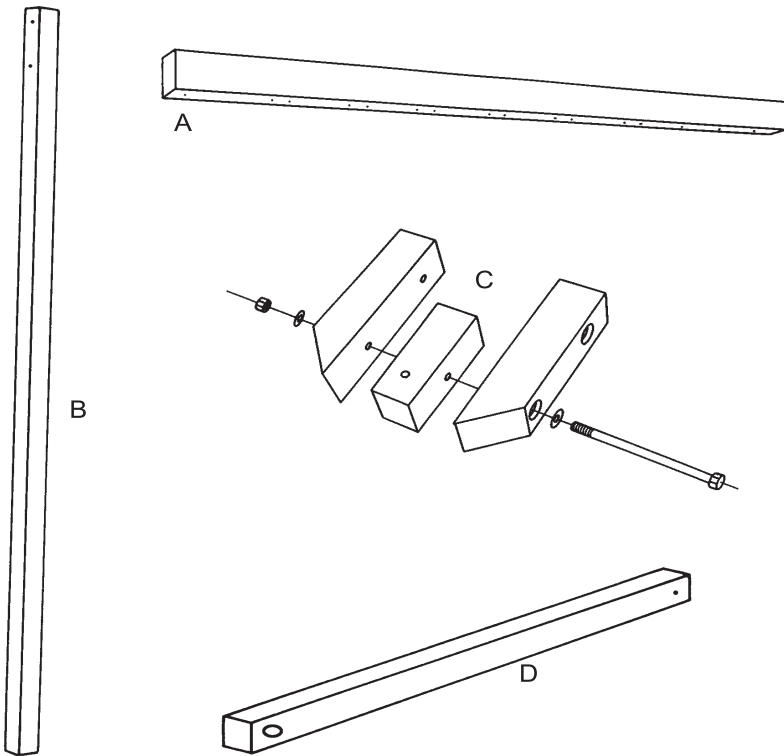
With a helper, carefully place part **R** on top of part **H** and attach with **MB5**, **SN1** and **FW3**. Part **R** will rest on part **P**. In similar manner attach part **Q** to **H**. Lean roofs together and connect roofs **Q** and **R** using part **W** with **LS1** and **FW1**.

Connect parts **Q** and **R** to part **P** with part **RC** using **PHS**.

INSTRUCTIONS FOR ASSEMBLY & ATTACHMENT OF ADJUSTABLE A-FRAME AND HEADBEAM

PARTS LIST

ITEM	DESCRIPTION	QUANTITY
A	138" or 169" Headbeam	(1)
B	118" A-Frame Leg	(2)
C	U-Shaped Bracket	(1)
D	65" Cross Brace	(1)



STEP 1: POSITION HEADBEAM AND INSTALL HANGERS

1

PARTS NEEDED:

(1) A (138" or 169" Headbeam)

HARDWARE NEEDED:

(6) DH or SH (Ductile Iron or Standard Hangers- only (4) required if 138" Headbeam)

(12) MB2 (3/8" x 6 1/2" Machine Bolt)

(12) FW3 (3/8" Fender Washer)

(12) FW2 (3/8" Standard Washer)

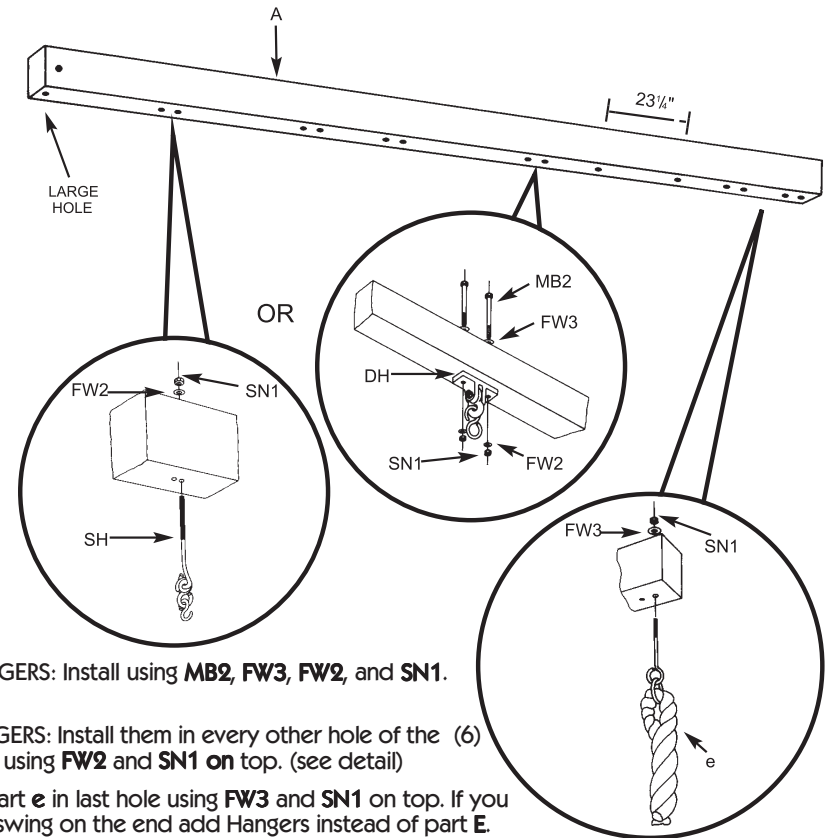
(12) SN1 (3/8" Loc Nut)

IF DH HANGERS COME WITH SET

(6) FW2 (3/8" Standard Washer)

(6) SN1 (3/8" loc Nut)

IF SH HANGERS COME WITH SET



PART DH HANGERS: Install using **MB2**, **FW3**, **FW2**, and **SN1**. (see detail)

PART SH HANGERS: Install them in every other hole of the (6) pairs of holes, using **FW2** and **SN1** on top. (see detail)

Now attach part **e** in last hole using **FW3** and **SN1** on top. If you substituted a swing on the end add Hangers instead of part **E**. (see detail)

Now position the headbeam to where it will be attached to the playset. Place the headbeam on the ground perpendicular to the location on the playset where it attaches. The end of the headbeam with a hole through the side attaches to the playset

STEP 3: ASSEMBLE ADJUSTABLE A-FRAME

2

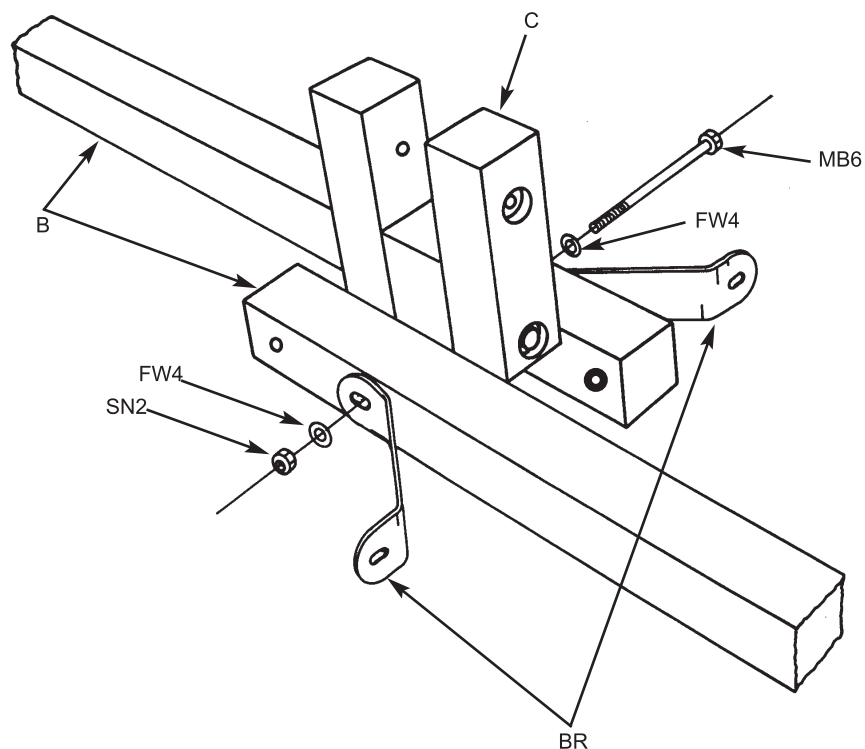
PARTS NEEDED:

- (2) B (118" A-Frame Leg)
- (1) C (U- Shaped Bracket)

HARDWARE NEEDED:

- (1) MB6 (1/2" x 12" Machine Bolt)
- (2) FW4 (1/2" Standard Washer)
- (1) SN2 (1/2" Loc Nut)
- (2) BR (Steel Support Bracket)

At the end of headbeam opposite the playset, place a part **B** and a Steel support Brace (**BR**) on each side of part **C** as shown. Bolt together as shown using **MB6**, **FW4** and **SN2**. **DO NOT TIGHTEN COMPLETELY.**



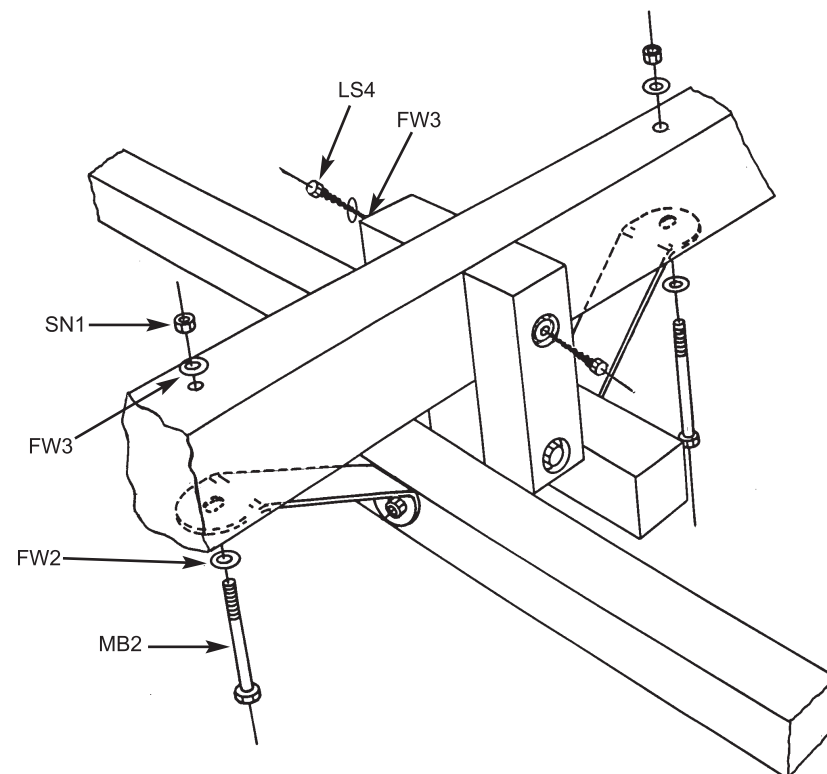
STEP 4: ATTACH HEADBEAM TO A-FRAME

3

HARDWARE NEEDED:

- (2) MB2 (3/8" x 6 1/2" Machine Bolt)
- (2) FW2 (3/8" Standard Washer)
- (4) FW3 (3/8" Fender Washer)
- (2) SN1 (3/8" Loc Nut)
- (2) LS4 (4" Lag Screw)

Place the headbeam into the U-Shaped Bracket part **C** of the Step 2 assembly and line up the steel support braces to the two single holes in the headbeam spaced 23 1/4" apart (49" apart if your set has a mini-deck) and attach using **MB2**, **FW3**, **FW2** and **SN1**. When the headbeam is sitting flat in the U-Bracket, attach with the **LS4** and **FW3** into the headbeam from each side. (You may need to prop up the end of the headbeam 6" for it to lay flat in the U-bracket.)



STEP 4: RAISE HEADBEAM & ATTACH TO PLAYSET

4

PARTS NEEDED:

(1) D (65' Cross Brace)

HARDWARE NEEDED:

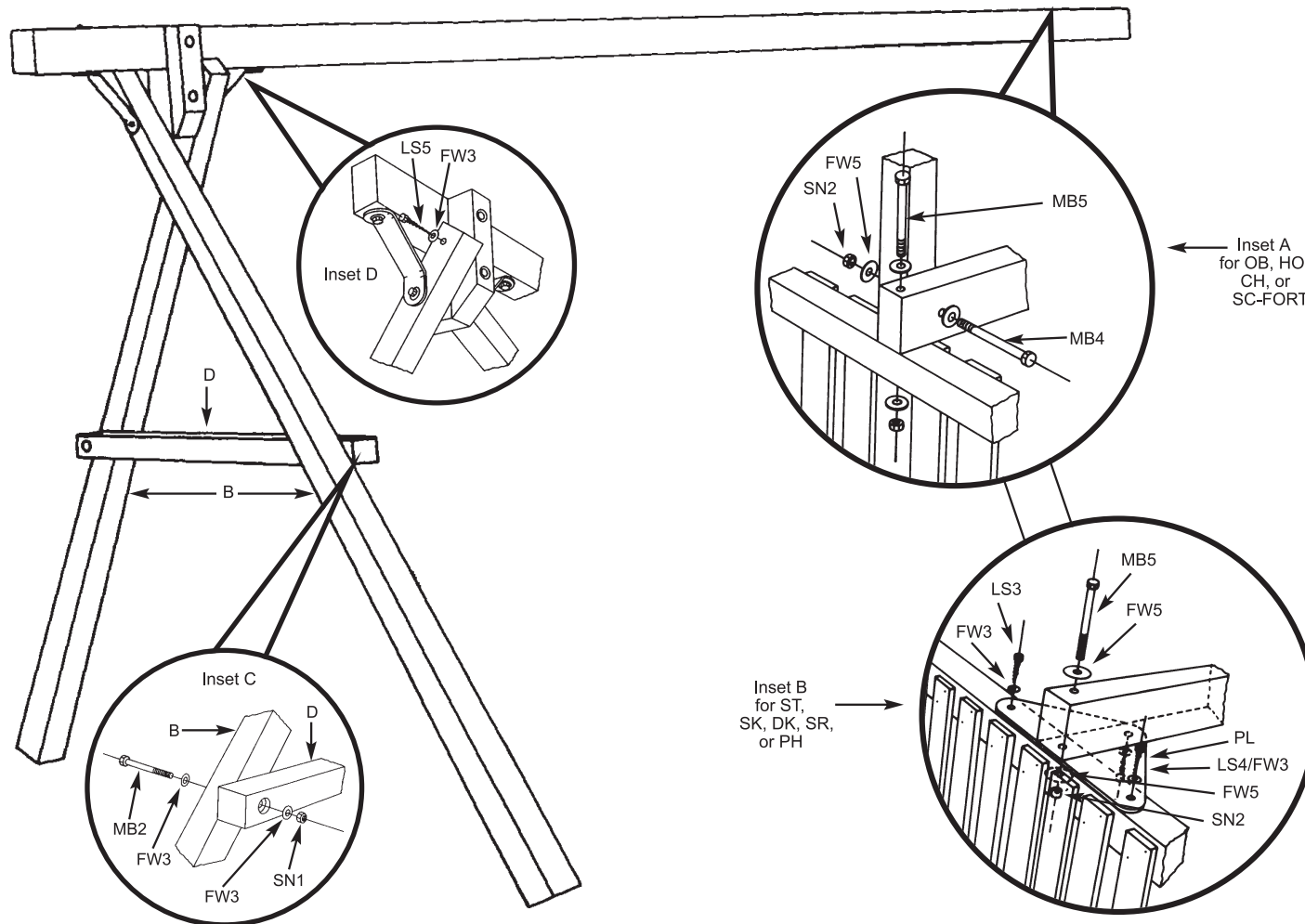
(2) MB2 (3/8" x 6 1/2" Machine Bolt)

(6) FW3 (3/8" Fender Washer)

(2) SN1 (3/8" Loc Nut)

(2) LS5 (3/8" x 5 1/2" Lag Screw)

ADDITIONAL HARDWARE DETERMINED BY WHICH SET YOU PURCHASED



Before raising the headbeam, determine from inset A or B how the headbeam attaches to the playset and the hardware needed based on the type set you purchased. Place the hardware needed to attach the headbeam up in the playset so it will be handy. If the attachment requires the Steel Triangular Plate (PL), go ahead and attach the plate to the safety rail.

With a helper, carefully lift the headbeam from both ends until it is level with the safety rail of playset while bringing the A-Frame legs together to support the headbeam. Place the headbeam on the safety rail being extremely careful it does not slip off and fall. With one person in the playset and the other steadying the A-Frame bolt the headbeam to the fort as shown. (see Inset A or B)

Place part D into position between parts B as shown. Using a level determine and mark the location of the holes to be made in part B so that the hole in part D is centered on part B. Mark the location on one side and drill a 3/8" hole in part B. Attach part D using MB2, FW3 and SN1. (see Inset C)

With one side of part D attached, check the location of the mark for the other hole and adjust if needed. Drill the hole and finish attaching part D. Once the A-Frame and headbeams are attached and level, tighten all bolts and install the LS5 and FW3 at the top of part B. (see Inset D)

Consumer Information Sheet for Playground Surfacing Materials¹

The U.S. Consumer Product Safety Commission (CPSC) estimates that about 100,000 playground equipment-related injuries resulting from falls to the ground surface are treated annually in the U.S. hospital emergency rooms. Injuries involving this hazard pattern tend to be among the most serious of all playground injuries, and have the 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. Playground equipment should never be placed on hard surfaces such as concrete or asphalt and 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 following table 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". However, it should be recognized that all injuries due to falls cannot be prevented no matter what surfacing material is used.

It is recommended that a shock absorbing material should extend a minimum of 6' in all directions from the perimeter of stationary equipment such as climbers and slides. However, because children may deliberately jump from a moving swing, the shock absorbing material should extend in the front and rear of a swing a minimum distance of 2 times the height of the pivot point measured from a point directly beneath the pivot point supporting structure.

This 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 the playground equipment, the availability of the material in your area, and its cost.

FALL HEIGHT IN FEET FROM WHICH A LIFE THREATENING HEAD INJURY WOULD NOT BE EXPECTED

TYPE OF MATERIAL	6" DEPTH	9" DEPTH	12" DEPTH
Double Shredded Bark Mulch	6'	10'	11'
Wood Chips	6'	7'	12'
Fine Sand	5'	5'	9'
Fine Gravel	6'	7'	10'

¹This information has been extracted from the CPSC publications "Playground Surfacing—Technical Information Guide" and "Handbook for Public Playground Safety." Copies of these reports can be obtained by sending a postcard to the Office of Public Affairs, U.S. Consumer Product Safety Commission, Washington, D.C. 20207. Or call the toll-free hotline: 1-800-638-2772.