

— Installation and Safe Use Manual —

FOR ULTIMATE JUNIOR BASKETBALL SYSTEM MODELS PR15, PR17, PR18, PR19



Customer Service
(800) 247-7668

PARTS LIST					
Item	Qty	Description	Item	Qty	Description
A	2	Square Pole Section	U	4	3/8" x 1/2" Hex Bolt
B	8	1/2" x 3/4" Button Head Screw (Black)	V	6	3/8" Flat Washer
C	8	1/2" Lock Washer (Black)	W	6	3/8" Lock Washer
D	2	Pole Connector Bar	X	2	3/8" Hex Nut
E	1	Extension Arm	Y	2	5/16" x 1" Carriage Bolt
F	1	Pole Cap	Z	2	5/16" Flat Washer
G	2	1/2" U-Bolt	AA	2	5/16" Lock Washer
H	4	1/2" Hex Nut	BB	2	5/16" Hex Nut
I	4	1/2" Flat Washer	CC	2	Spacer Block
J	4	1/2" Lock Washer	DD	1	Rim/Net
K	2	1/4" x 8" Carriage Bolt	EE	1	Pole Pad (optional on PR15, PR17, and PR18)
L	2	1/4" Wing Nut	FF	1	5/16" Hex Key
M	2	Predrilled Wood Panel	GG	1	Warning Label
N	TBD	Premix Concrete	HH	4	"J" Bolt (only on X Systems)
O	1	BA475SS Backboard (PR15)	II	4	Rebar (only on X Systems)
P	1	BA47 Backboard (PR17)	JJ	1	Template (only on X Systems)
Q	1	BA487UX Backboard (PR18)	KK	12	5/8" Hex Nut (only on X Systems)
R	1	BA487X (BA9488C)	LL	4	5/8" Lock Washer (only on X Systems)
S	1	PR15 Adapter	MM	8	5/8" Flat Washer (only on X Systems)
T	2	3/8" x 1" Carriage Bolt	NN	4	"J" Bolt Safety Cap (only on X Systems)

Warning!

Improper installation, maintenance or use may cause product failure and serious personal injury.

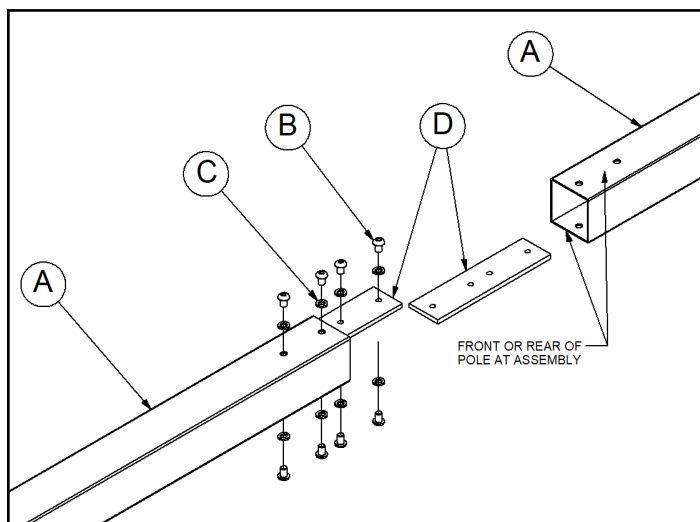
- ◆ Inspect all contents prior to installation. Report any missing parts to dealer immediately.
- ◆ Carefully read all instructions before proceeding. Pay special attention to all safety instructions.
- ◆ Save the instructions in the event that the manufacturer must be contacted in the future for maintenance information.

1. Call your local utility locating service before digging, usually by dialing 811, to avoid serious injury or service interruptions. Also avoid lawn sprinkler lines.

IF YOU ARE INSTALLING A DIRECT BURY POLE SYSTEM

- 2a. Lay two *Square Pole Sections* (A) on a flat surface with drilled ends positioned as shown in Figure 1. Loosely attach two *Pole Connector Bars* (D) to one of the *Pole Sections* (A) using $1/2" \times 3/4"$ *Button Head Screws* (B), $1/2"$ *Lock Washers* (C) and $5/16"$ *Hex Key* (FF). Connect second *Square Pole Section* (A) loosely. Tighten all $1/2" \times 3/4"$ *Button Head Screws* (B) only when the drilled ends of the *Square Pole Sections* (A) are lined up forming a straight pole assembly with minimal gap between the sections. If you have access to a torque wrench, torque to 75 foot pounds or get as tight as possible by hand. **If you have access to a torque wrench torque to 75 foot pounds or tighten as tight as possible by hand**

NOTE: When installed in the footing, the *Button Head Screws* (B) need to be on the rear and front of the pole not the sides for maximum rigidity.



- 3a. Determine the position of the pole assembly by taking into account that the distance between the front of the pole assembly and the face of the backboard is approximately 36".
- 4a. Dig a hole that is a minimum of 12" diameter and 40" deep, deeper in heavy frost areas. Remove dirt in the bottom 1/3 of the hole in a bell shape to improve pole stability. The amount of *Premix Concrete* (N) required will depend on the final size of the hole, but a 12" diameter hole, 40" deep with minor additional soil removed from the hole will require approximately 3.5 cubic feet of *Premix Concrete* (N). Always better to have too much rather than too little on site. See Figure 3.

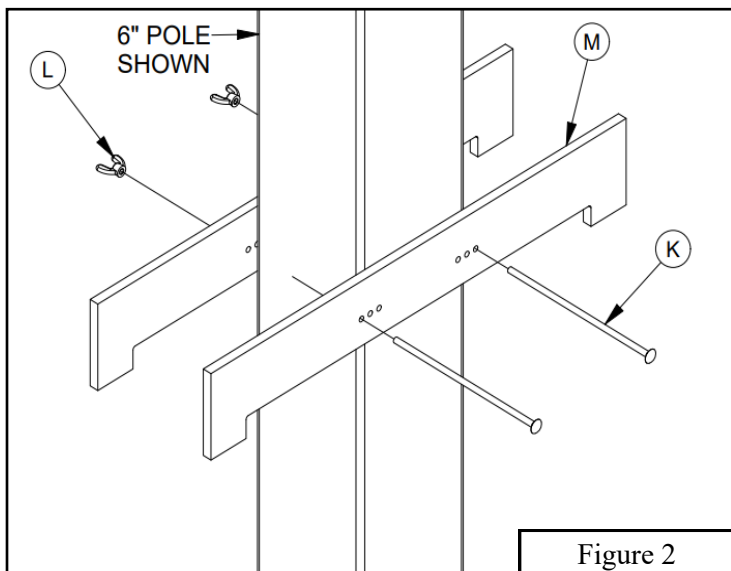


Figure 2

SAFETY INSTRUCTIONS

FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS MAY RESULT IN SERIOUS INJURY, PROPERTY DAMAGE AND WILL VOID WARRANTY.

Owner must ensure that all players know and follow the rules for safe operation of this system.

To ensure safety, do not assemble this system without following the instructions carefully. A high probability of serious injury exists if this system is not installed, maintained, and operated properly.

- If using a ladder during assembly, use extreme caution.
- 2 people are recommended for safe assembly.
- Before digging, contact utility company to locate underground power cables, gas and water lines. Ensure there are no overhead power lines within 20 ft. (7m) radius of pole location.
- Climate, corrosion or misuse could result in system failure.
- If technical assistance is required, contact the manufacturer.
- Minimum operational height is 6'6" (1.98m) to the bottom of the backboard. Do not install so that bottom of backboard is below this height.
- Assembly will require lifting and bending that may result in injury to persons not accustomed to this type of activity.

Most injuries are caused by misuse and/or not following instructions. Use caution when using and installing this system.

WARNING

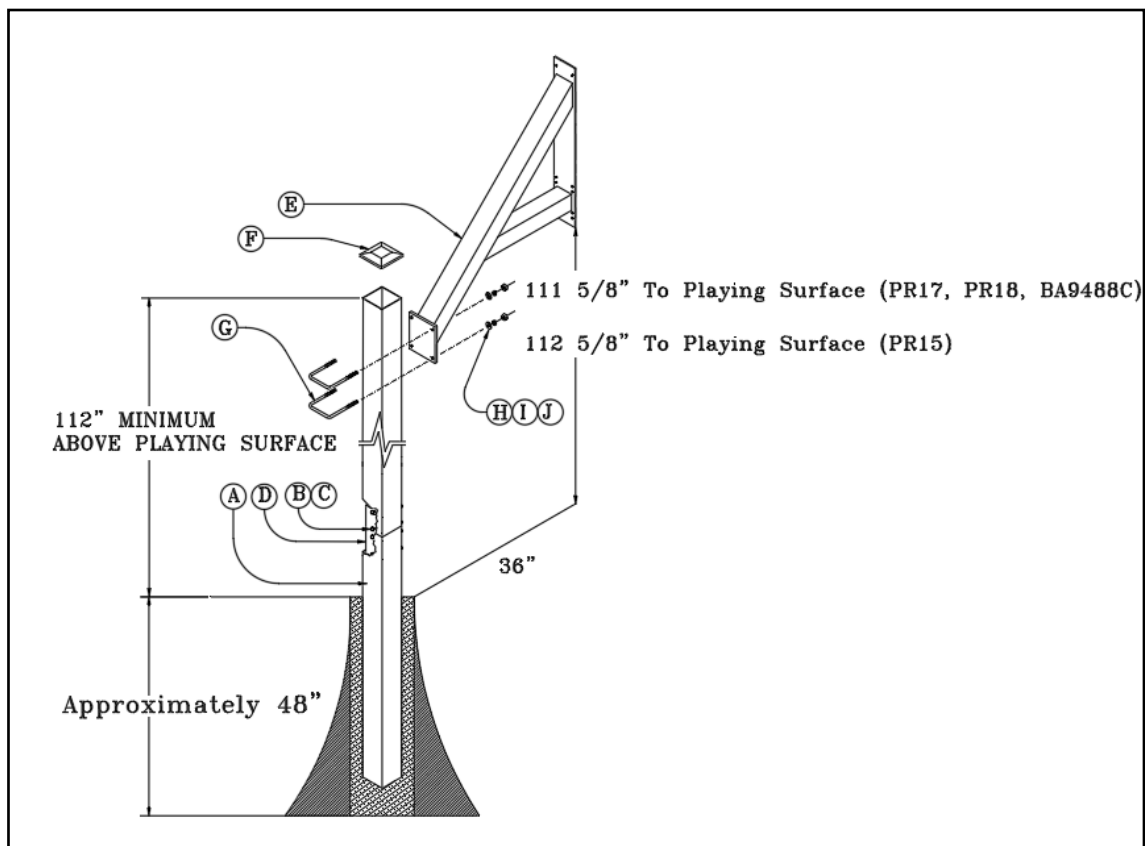
FAILURE TO FOLLOW THESE WARNINGS MAY RESULT IN SERIOUS INJURY AND/OR PROPERTY DAMAGE.

Owner must ensure that all players know and follow these rules for safe operation of the system.

- DO NOT remove or cover this warning label
- DO NOT HANG on the rim or any part of system including backboard, support braces or net.
- During play, especially when performing dunk type activities, keep player's face away from the backboard, rim and net. Serious injury could occur if teeth/faces come in contact with backboard, rim or net.
- Do not slide, climb or play on pole.
- When adjusting height, keep hands and fingers away from moving parts.
- Do not allow young children to adjust system.
- During play, do not wear jewelry (rings, watches, necklaces, etc.). Objects may entangle in net.
- Keep organic material away from pole base. Grass, Litter, etc. could cause corrosion and/or deterioration.
- Check pole system for signs of corrosion (rust, pitting, chipping) and repaint with exterior enamel paint available from the manufacturer. If rust has penetrated through the steel anywhere, replace pole immediately.
- Check system before each use for loose hardware, excessive wear signs of corrosion and general instability and repair before play is allowed.
- Never play on damaged equipment.

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- 5a. Using the two $1/4"$ x 8" *Carriage Bolts* (K) and $1/4"$ *Wing Nuts* (L), sandwich the *Predrilled Wood Panels* (M) around the pole assembly at a location where the pole assembly will insert into the concrete footing. Use the set of holes that are closest to the side of the pole assembly. Position them as shown in Figure 2. The *Installation Aid* (K-M) can be adjusted to support the pole in the proper position when inserted into the concrete.
- 6a. Fill the footing to the top with medium wet fully mixed concrete. Never use the *Premix Concrete* (N) dry.
- 7a. Insert the pole assembly into the center of the footing making sure that one set of $1/2"$ x $3/4"$ *Button Head Screws* (B) are on the back side of the pole assembly, and that the front face of the pole assembly is square to the playing surface. **Position of the screws is critical to the rigidity of the pole.**
- 8a. While the concrete is still wet, and the pole assembly is movable, adjust the *Installation Aid* (K-M) on the pole assembly to help maintain the top of the pole at 112" from the playing surface, plumb in both directions, and with the front face of the pole parallel to the court.
- 9a. Fill the inside of the pole assembly with wet *Premix Concrete* (N) if desired to increase pole stability. This will require approximately 1.8 cubic feet of additional *Premix Concrete* (N). Trowel the top of the footing and clean concrete off the pole for a finished look.
- 10a. **ALLOW AT LEAST 4 DAYS FOR CONCRETE TO CURE BEFORE COMPLETING THE INSTALLATION TO AVOID FOOTING FAILURE. Install *Warning Label* (GG) at eye level on the rear of the pole. If your warning label becomes damaged or is unreadable, request a no cost replacement from the manufacturer.**
- 11a. If you did not fill the pole with concrete, drill an $1/8"$ - $1/4"$ hole through one wall in the bottom of your pole assembly opposite the playing surface to ensure no water builds up inside the pole.
- 12a. Discard the *Installation Aid* (K-M) once footing is cured.
- 13a. Proceed to #20. **TO CONTINUE INSTALLATION**



IF YOU ARE INSTALLING A REMOVABLE PEDESTAL MOUNT SYSTEM

- 2b. Your pole is shipped in 2 sections reducing freight costs and handling difficulty and increasing pole rigidity. The lower section has a 12" square pedestal base. Lay the two different *Pole Sections* (A) end to end with the drilled holes adjacent to each other. See Figure 4.
- 3b. Using the $1/2"$ *Button Head Screws* (B), $1/2"$ *Lock Washers* (C), and $5/16"$ *Hex Key* (FF) loosely attach two *Pole Connector Bars* (D) to the inside of the end of the lower *Pole Section* (A). See Figure 4.
- 4b. Slide the other *Pole Section* (A) over the two *Pole Connector Bars* (D) up against the partially assembled *Pole Section* (A). See Figure 4.
- 5b. Using the remaining $1/2"$ *Button Head Screws* (B) and $1/2"$ *Lock Washers* (C), attach the upper *Pole Section* (A) to the *Pole Connector Bars* (D). See Figure 4.
- 6b. Tighten all $1/2"$ *Button Head Screws* (B) only when the two *Pole Sections* (A) fit tightly together. **If you have access to a torque wrench, torque to 75 foot pounds or get as tight as possible by hand.**

NOTE: When installed in the footing, the *Button Head Screws* (B) need to be on the rear and front of the pole not the sides for maximum rigidity.

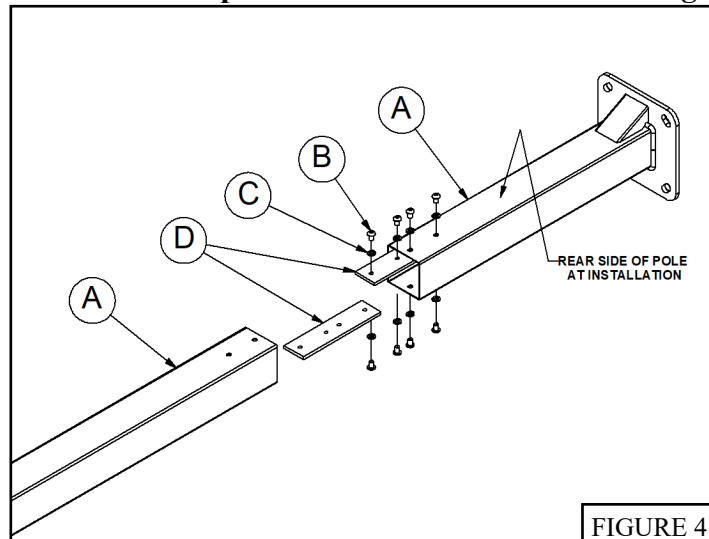


FIGURE 4

- 7b. Dig a hole a minimum of 20" in diameter and 36" deep. Bell out the bottom 12" of the hole to a diameter that is at least 4" larger than the diameter of the hole at the top. Digging the hole too big is better than digging it too small. See Figure 5.
- 8b. Prepare the "J" Bolt assembly by first threading a $5/8"$ *Hex Nut* (KK) onto each "*J*" Bolt (HH) so that approximately 2-1/2" of thread is protruding above the nut. Place the threaded end of each "*J*" Bolt (HH) through the four holes in the *Template* (JJ). Thread a second $5/8"$ *Hex Nut* (KK) onto each "*J*" Bolt (HH) on the top side of the *Template* (JJ). Tighten the nuts on both sides of the *Template* (JJ), making sure that the same length of "*J*" Bolt (HH) (2" minimum) is protruding above the *Template* (JJ) in all four corners and that the "*J*" Bolt (HH) "legs" are pointing toward the center of the *Template* (JJ). See Figure 5.
- 9b. Before pouring the concrete, make sure you have the required tools available: a level, a broomstick or similar pole to vibrate the concrete, and a tape measure to correctly place the "J" Bolt Assembly.
- 10b. A 20" diameter by 36" deep hole, with additional soil removed from the bottom 1/3, will require approximately 7 cubic feet of *Premix Concrete* (N). Allow for more if the hole is deeper or wider. Make sure you have enough concrete on-site before pouring, because allowing a portion to dry before the hole is completely filled will affect the strength of the footing.

- 11b. You are now ready to complete the most critical portion of the installation. Please note (and avoid) these common installation mistakes:
- ◆ Proceeding without reading instructions fully.
 - ◆ Stopping short of the required hole size.
 - ◆ Underestimated the amount of concrete required, allowing part of base/footing to cure before you could finish pouring.
 - ◆ Just "eyeballing" the squareness of the base. When assembled, the pole and board need to be parallel or square to your driveway/playing surface.
 - ◆ Being overanxious to mount the pole and board before the footing was fully cured. (A defective footing is much harder to dig out than to install.)
 - ◆ Damaging threads on J-Bolts making it impossible to install 5/8" Hex Nuts (KK).
- 12b. Mix the concrete according to the instructions on the bag. It is a good idea to have the concrete mixture be medium wet. This will increase your working time and allow batches to mix in the hole. Pour the hole full to ground level. Insert the broomstick into the wet concrete and agitate it up and down. REPEAT SEVERAL TIMES.
- 13b. Drop the *Rebar* (II) into the wet concrete to help support the concrete footing.
- 14b. Insert the "J" bolt assembly into the wet concrete. Be sure the *Template* (JJ) is parallel to the desired position of the backboard and the edge of the playing surface. Use the tape measure to double check. Vibrate the assembly as you insert it so that concrete fills in around the "J" Bolts (HH). Be sure the *Template* (JJ) is pressed firmly against the surface of the wet concrete. The top of the concrete footing should be flush with the playing surface. See Figure 5.
- 15b. Clean excess concrete from edge of hole and level the concrete from the edge of the *Template* (JJ) to the edge of the hole. **Allow concrete to cure for 4 days.**

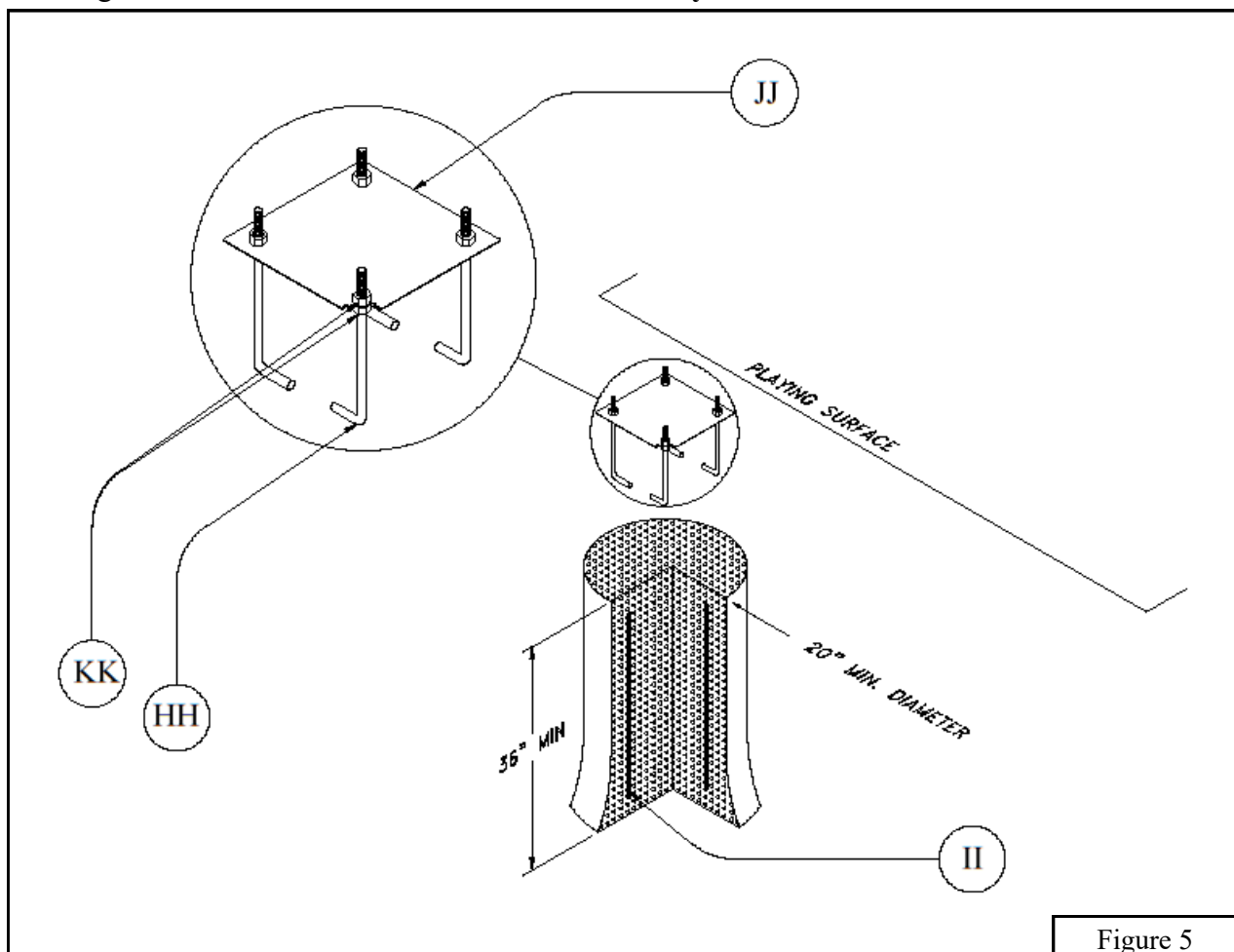
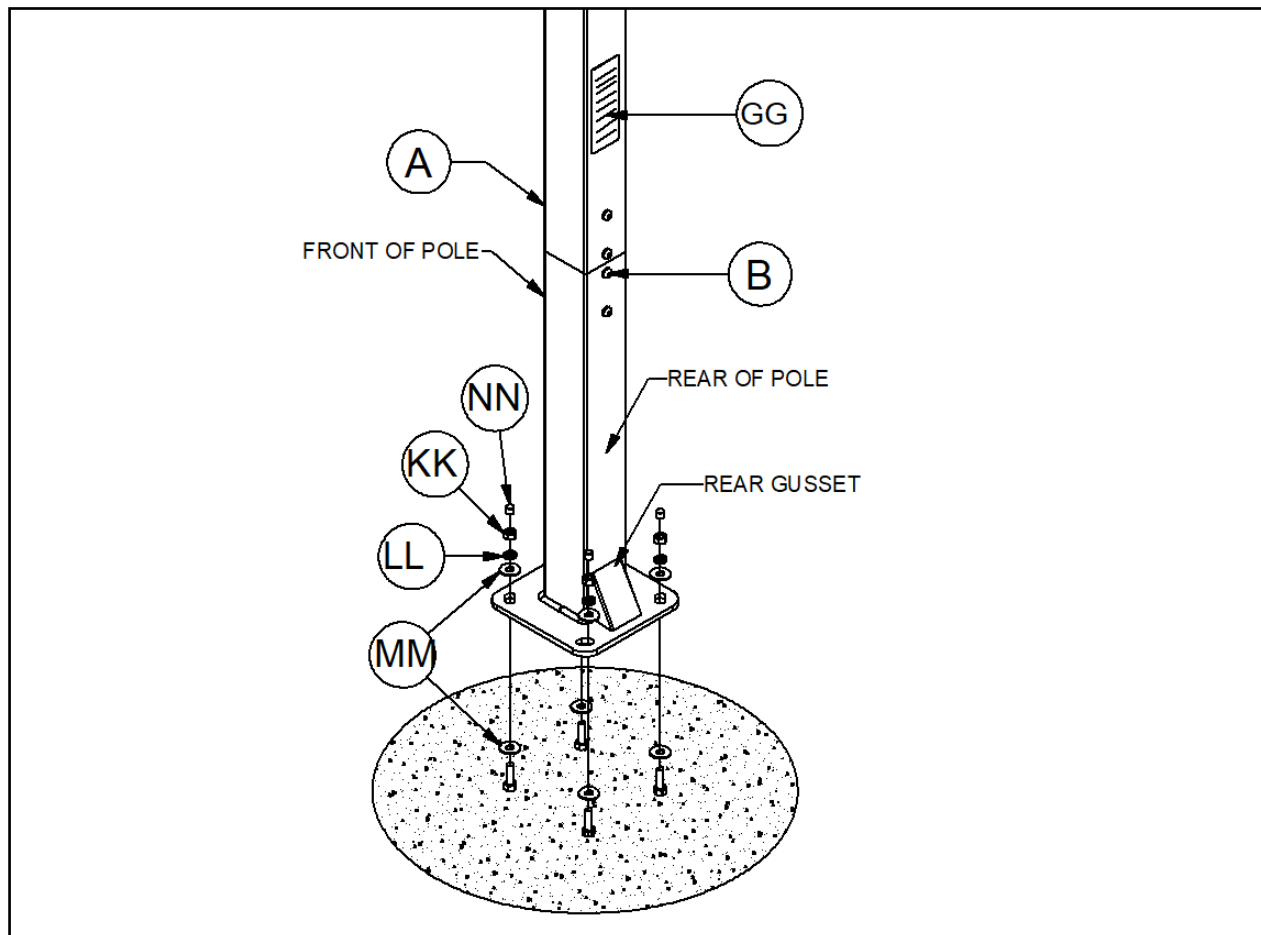


Figure 5

- 16b. Once the concrete is cured you may now remove the upper 5/8" *Hex Nuts* (KK) from the "*J*" *Bolts* (HH) and remove and discard the *Template* (JJ).
- 17b. Place the 5/8" *Hex Nuts* (KK) you just removed back on each "*J*" *Bolt* (HH) and finger tighten against the nut that is embedded in the concrete footing. Install one 5/8" *Flat Washer* (MM) on top of each 5/8" *Hex Nut* (KK). See Figure 6.
- 18b. Install the base of the pole assembly over the "*J*" *Bolts* (HH) with the rear support gusset on the side of the pole opposite to the court. Place 5/8" *Flat Washers* (MM), 5/8" *Lock Washers* (LL) and 5/8" *Hex Nuts* (KK) on "*J*" *Bolts* (HH) above the pole base to tighten base down. You can level pole if needed by adjusting the 5/8" *Hex Nuts* (KK) above and below the base plate. Make sure all hardware is tight once leveled. Press "*J*" *Bolt Safety Caps* (NN) over the exposed ends of "*J*" *Bolts* (HH). You are now ready to finish the installation of your basketball system. See Figure 6.

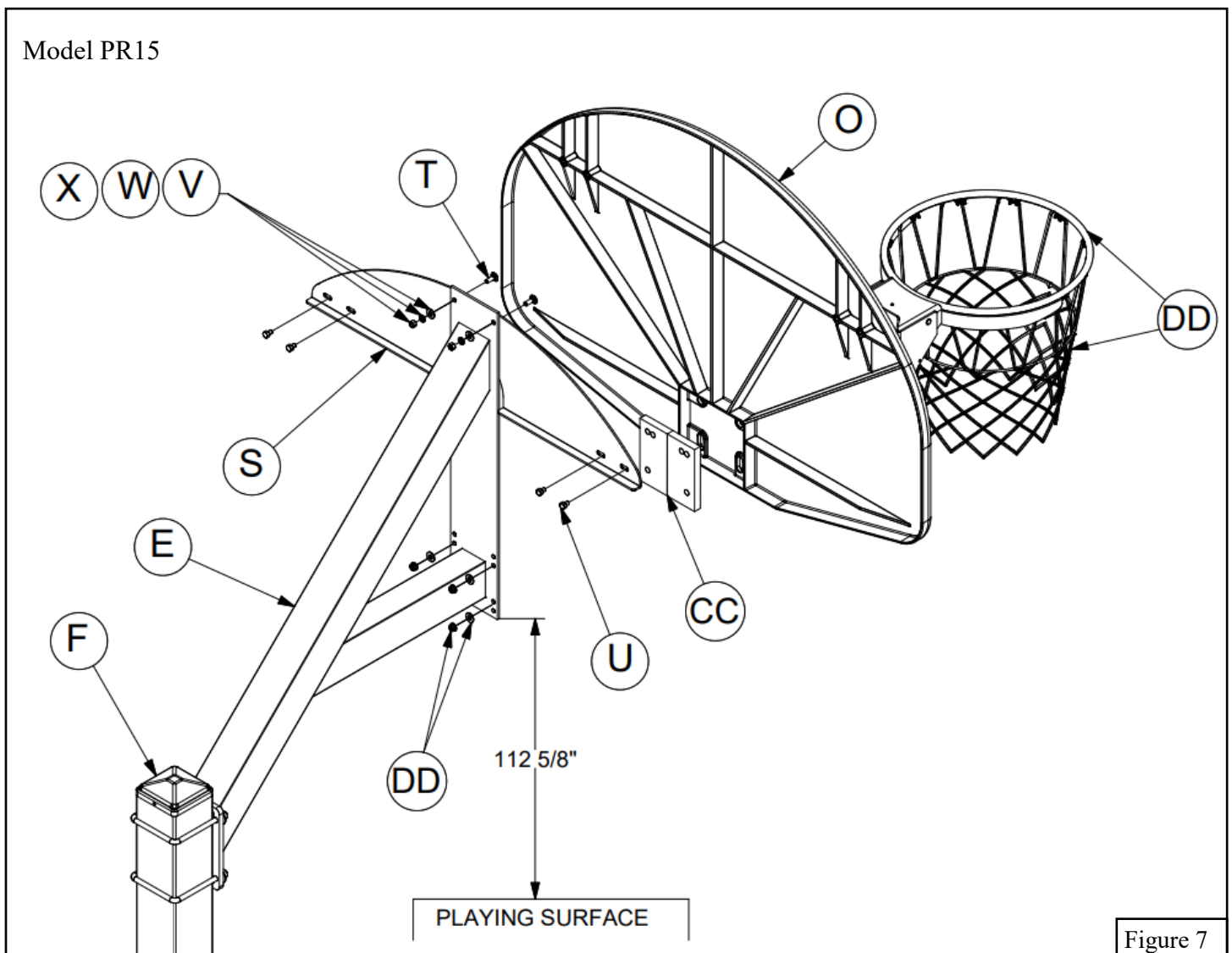
NOTE: Positioning of the connecting screws to the front and rear of the pole is critical to the rigidity of the pole.

- 19b. **Install the *Warning Label* (GG) at eye level on the rear of the pole.**
20. Using 1/2" *U-Bolts* (G), 1/2" *Hex Nuts* (H), 1/2" *Flat Washers* (I), and 1/2" *Lock Washers* (J), attach the *Extension Arm* (E) to the pole assembly. Attaching loosely will allow arm to be adjusted to the proper height. See Figure 3.
21. Depending on the system being installed, the bottom of the mounting plate on the front of the *Extension Arm* (E) should be located the prescribed distance from the finished playing surface. See Figure 3.
22. Proceed to #23x, 23y, or 23z depending on your system. **TO COMPLETE INSTALLATION**



IF YOU ARE ASSEMBLING BISON MODEL PR15

- 23x. Locate the bottom of the backboard mounting plate on the front of the *Extension Arm (E)* **112 5/8"** from the playing surface. See Figure 7.
- 24x. Use the *3/8" x 1" Carriage Bolts (T)*, *3/8" Flat Washers (V)*, *3/8" Lock Washers (W)*, and *3/8" Hex Nuts (X)* to mount the *PR15 Adapter (S)* to the *Extension Arm (E)*. See Figure 7.
- 25x. Position the *Spacer Blocks (CC)* between the *BA475SS Backboard (O)* and the *Extension Arm (E)* at the rim mounting location. Use the *3/8" x 1/2" Hex Bolts (U)* to attach the *BA475SS Backboard (O)* to the *PR15 Adapter (S)*. See Figure 7.
- 26x. Mount the *Rim (DD)* through the *BA475SS Backboard (O)*, *Spacer Blocks (CC)* and hole in the lower portion of the *Extension Arm (E)* using the hardware provided with the *Rim (DD)*.
- 27x. Install *Pole Cap (F)*, *Net (DD)*, and *Pole Pad (EE)* (if applicable).

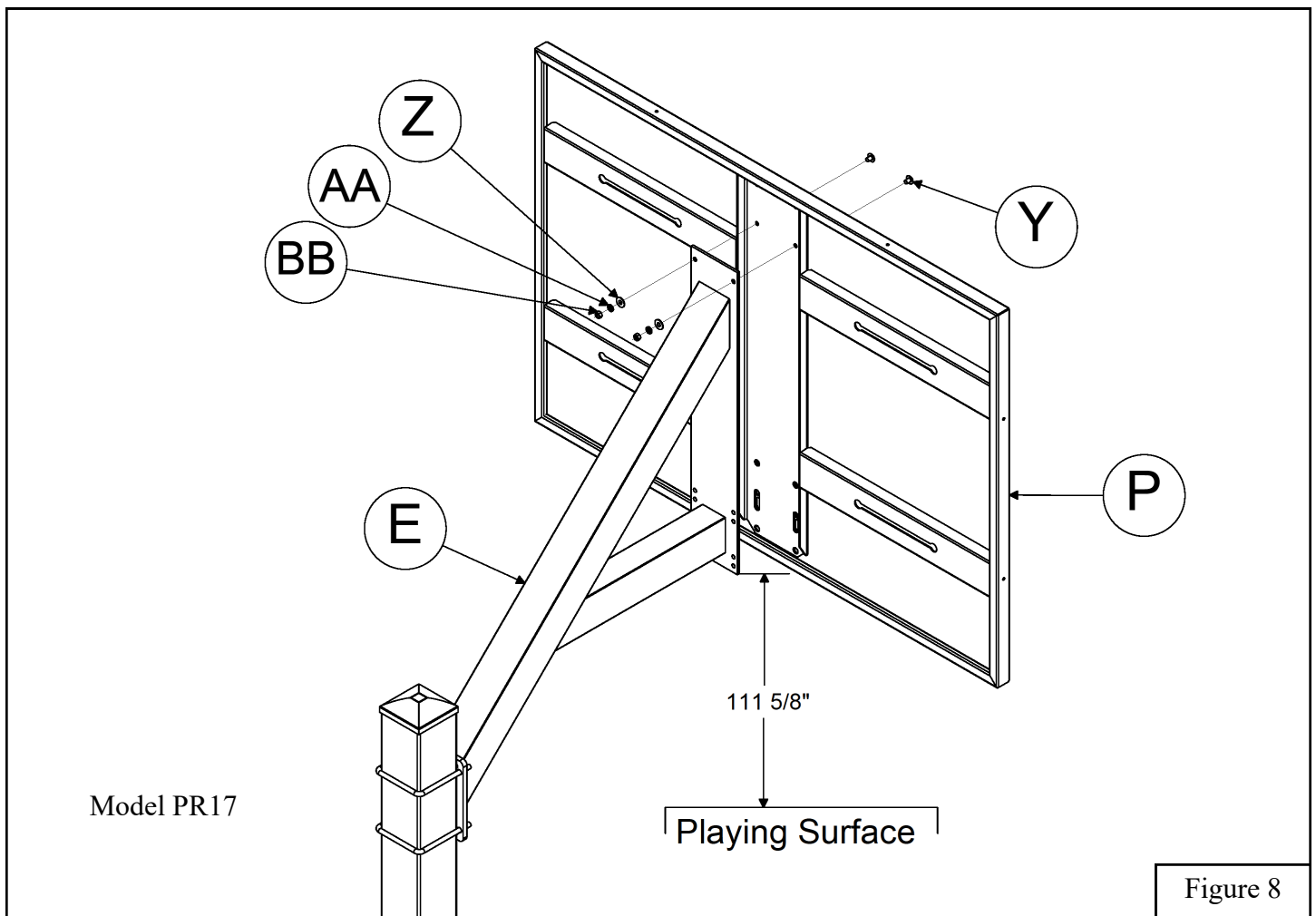


Note!

It is recommended to restrict aggressive play for the first two weeks to allow the concrete to completely cure.

IF YOU ARE ASSEMBLING BISON MODEL PR17

- 23y. Locate the bottom of the backboard mounting plate on the front of the *Extension Arm* (E) **111 5/8"** from the playing surface. See Figure 8.
- 24y. Use the *5/16" x 1" Carriage Bolts* (Y), *5/16" Flat Washers* (Z), *5/16" Lock Washers* (AA), and *5/16" Hex Nuts* (BB) to mount the *BA47 Backboard* (P) to the *Extension Arm* (E). Leave hardware loose. See Figure 8.
- 25y. Mount the *Rim* (DD) through the *BA47 Backboard* (P) and the lower holes in the *Extension Arm* (E) using the hardware provided with the *Rim* (DD).
- 26y. Tighten all hardware when *BA47 Backboard* (P) and *Rim* (DD) are level.
- 27y. Install *Pole Cap* (F), *Net* (DD), and *Pole Pad* (EE) (if applicable).



Note!
It is recommended to restrict aggressive play for the first two weeks to allow the concrete to completely cure.

IF YOU ARE ASSEMBLING BISON MODEL PR18 OR PR19

- 23z. Locate the bottom of the backboard mounting plate on the front of the *Extension Arm* (E) **111 5/8"** from the playing surface. See Figure 9.
- 24z. Attach the *BA487X Backboard* (R) or *BA487UX Backboard* (Q) to the *Extension Arm* (E) by placing the two threaded studs in the top of the backboard frame through the hole in the top of the *Extension Arm* (E) and securing with *5/16" Flat Washers* (Z), *5/16" Lock Washers* (AA), and *5/16" Hex Nuts* (BB). Leave hardware loose. See Figure 9.
- 25z. Mount the *Rim* (DD) through the *BA487X Backboard* (R) or *BA487UX Backboard* (Q) and the hole in the *Extension Arm* (E) using the hardware provided with the *Rim* (DD). Make sure that the tubular spacers are installed in the 4 rim holes in the backboard to keep the rim from contacting the backboard surface.
- 26z. Tighten all hardware when backboard and *Rim* (DD) are level.
- 27z. Install *Pole Cap* (F), *Net* (DD), and *Pole Pad* (EE) (if applicable).

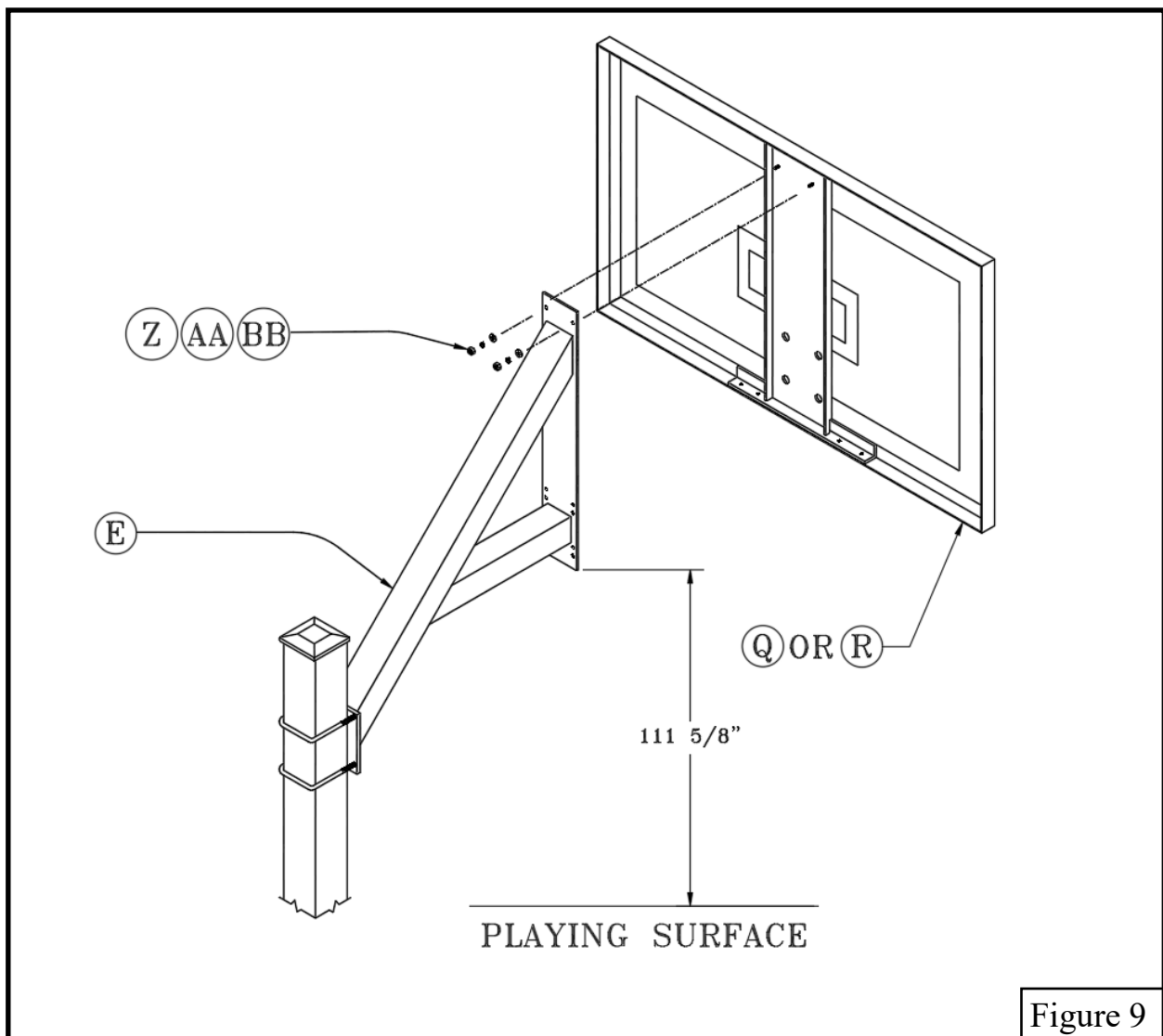


Figure 9

Note!

It is recommended to restrict aggressive play for the first two weeks to allow the concrete to completely cure.