



Installation and Safe Use Manual

**For BA8350, BA8350S, BA9350, BA9350S, BA9350X,
BA9350SX, PR94UZX, PR95UZX SYSTEMS**



Customer Service
(800) 247-7668

Zip Crank Basketball Systems

Scan for Supplemental
Installation and
Assembly Video

PARTS LIST

Item	Qty	Description	Item	Qty	Description
A	2	Pole Section	Z	1	Rim and Net
B	1	Pole Plate	AA	1	Pole Cap
C	2	Extension Channel	BB	1	Height Gauge
D	1	Backboard "H" Frame	CC	1	Pointer
E	2	Pole Plate Bracket	DD	3	1/4" Flange Nut
F	2	Extension Channel Bracket	EE	2	1/4" x 1" Hex Bolt
G	8	Pivot Bushings	FF	1	Crank Handle
H	4	3/8" x 8" Hex Bolt	GG	TBD	Quick Dry Concrete (supplied by customer)
I	4	3/8" Thin Lock Nut	HH	1	Pole Padding (if applicable)
J	8	3/8" x 1" Hex Bolt	II	2	1/4" x 8" Carriage Bolt
K	8	3/8" Flat Washer	JJ	2	1/4" Wing Nut
L	8	3/8" Lock Washer	KK	2	Pre-Drilled Wooden Panel
M	8	3/8" Hex Nut	LL	8	1/2" Button Head Screw (Black)
N	1	Crank	MM	8	1/2" Lock Washer (Black)
O	2	1/2" x 5" Hex Bolt	NN	2	Pole Connector Bar
P	2	1/2" Thin Lock Nut	OO	1	5/16" Hex Key
Q	3	Square U-Bolt	PP	4	"J" Bolt (only on X Systems)
R	6	1/2" Flat Washer	QQ	4	Rebar (only on X Systems)
S	6	1/2" Lock Washer	RR	1	Template (only on X Systems)
T	6	1/2" Hex Nut	SS	12	5/8" Hex Nut (only on X Systems)
U	4	5/16" x 1" Truss Head Screw	TT	4	5/8" Lock Washer (only on X Systems)
V	4	5/16" Flat Washer	UU	8	5/8" Flat Washer (only on X Systems)
W	4	5/16" Lock Washer	VV	4	"J" Bolt Safety Cap (only on X Systems)
X	4	5/16" Hex Nut	WW	1	Warning Label
Y	1	Backboard			

Warning!

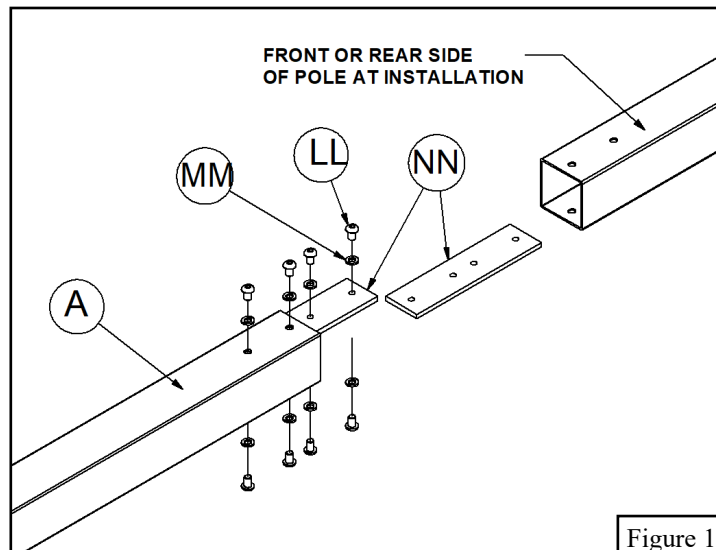
Improper installation, maintenance or use may cause product failure and serious personal injury.

- ♦ Inspect all contents prior to installation. Report any missing parts to dealer immediately.
 - ♦ Read all instructions before proceeding.
 - ♦ Save this instruction in the event that the manufacture 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 and service interruptions. Also avoid lawn sprinkler lines.
 2. Determine the desired position of the pole by taking into consideration that the distance between the face of the pole and the face of the backboard changes as the rim height is adjusted. At the top position (official 10' rim height) this distance is approximately 30" and at the lowest point is approximately 43". See Figure 2A.

3. Proceed to either 4a or 4b depending on the model you are installing.

**IF YOU ARE INSTALLING A DIRECT BURY SYSTEM
(BA8350, BA8350S, BA9350, BA9350S, PR94UZC OR PR95UZC)**

- 4a. Your pole is shipped in 2 sections reducing freight costs and handling difficulty and increasing pole rigidity. Lay the two *Pole Sections* (A) on a flat surface with the *Pole Section* (A) ends with the drilled holes end to end. See Figure 1.
- 5a. Using the 1/2" *Button Head Screws* (LL), 1/2" *Lock Washers* (MM), and 5/16" *Hex Key* (OO) attach two *Pole Connector Bars* (NN) to the inside of the end of one of the two *Pole Sections* (A). See Figure 1.
- 6a. Slide the other *Pole Section* (A) over the two *Pole Connector Bars* (NN) and up against the partially assembled *Pole Section* (A). See Figure 1.
- 7a. Using the remaining 1/2" *Button Head Screws* (LL) and 1/2" *Lock Washers* (MM), attach the 2nd *Pole Section* (A) to the *Pole Connector Bars* (NN). See Figure 1.
- 8a. Tighten all 1/2" *Button Head Screws* (LL) 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 (LL) need to be on the rear and the front of the pole not the side for maximum rigidity.

- 9a. Dig a 12" minimum diameter hole at least 36" deep. Remove additional soil from the bottom 1/3 - 1/2 of the hole into a bell shape. In heavy frost climates a deeper footing will increase pole stability. The amount of *Premix Concrete* (GG) required will depend on final hole size. A 12" diameter x 36" deep hole with additional soil removed will take approximately 3 cubic feet of concrete. Always better to have too much rather than too little on site.
- 10a. Using the two 1/4" x 8" *Carriage Bolts* (II) and 1/4" *Wing Nuts* (JJ) provided, sandwich the two *Pre-Drilled Wooden Panels* (KK) around the pole assembly at a location where the square pole will protrude from the footing. Use the set of holes in the *Pre-Drilled Wooden Panels* (KK) that are closest to the side of the pole assembly depending on pole size. Position them as shown in the illustration to allow clearance above the concrete footing. See Figures 2A and 2B.
- 11a. Tension the 1/4" *Wing Nuts* (JJ) so that the wood cannot move up or down on the pole once you are satisfied that the pole assembly is protruding above the court surface the height specified. See Figure 2B.

- 12a. Adjustment of the angle of the *Pre-Drilled Panels* (KK) on the pole to match the ground surface adjacent to the footing by slightly loosening and re-tightening the *1/4" Wing Nuts* (JJ) will help keep the pole assembly plumb while concrete is curing.
- 13a. Fill the hole to the top with medium wet, fully mixed concrete. Never use the *Premix Concrete* (GG) dry.
- 14a. Insert the pole assembly into the center of the footing making sure that one set of the *1/2" x 3/4" Button Head Screws* (LL) are on the back side of the pole assembly and the flat front face of the pole assembly is square to the playing surface. **POSITION OF THE SCREWS IS CRITICAL TO THE RIGIDITY OF THE POLE.**
- 15a. While the concrete is still wet and the pole assembly is moveable, adjust the *Pole Installation Kit* (II, JJ, KK) on the pole assembly to help maintain the top of the pole assembly at 110" from the playing surface, plumb in both directions and with the front face parallel to the playing surface. See Figure 2A.
- 16a. Filling the inside of the pole assembly with wet *Premix Concrete* (GG) will increase pole assembly stability and require additional *Premix Concrete* (GG).
- 17a. Trowel the top of the footing and clean the concrete off the pole assembly for a finished look. **Allow at least 4 days for the concrete to cure before completing installation to avoid footing failure.**
- 18a. Discard the *Pole Installation Kit* (II, JJ, KK) once footing is cured and install the *Warning Label* (WW) at eyelevel on the rear of the pole. **IF YOUR WARNING LABEL BECOMES DAMAGED OR UNREADABLE, REQUEST A NO COST REPLACEMENT.**
- 19a. Drill a 1/8" - 1/4" hole through one wall near the bottom of the pole assembly to ensure no water builds up inside the pole assembly if you did not fill the pole assembly to the top with concrete.
- 20a. Proceed to instruction #23.

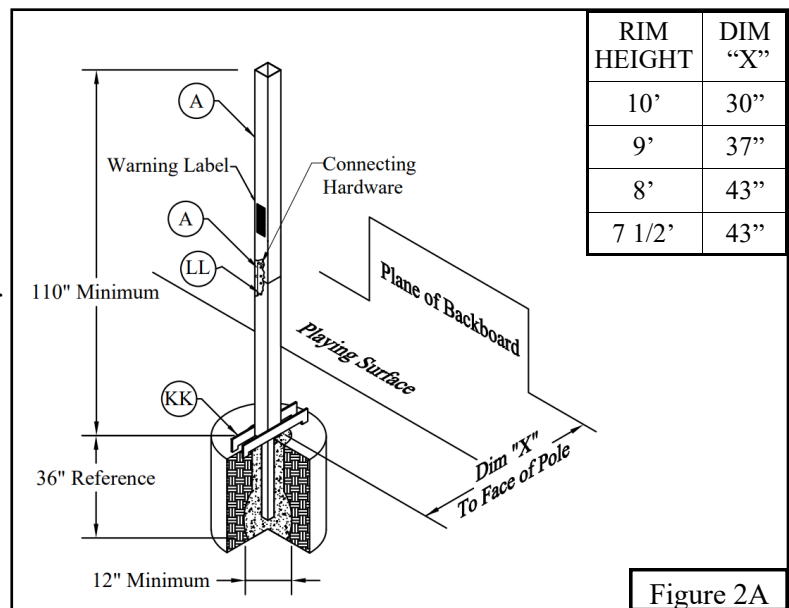


Figure 2A

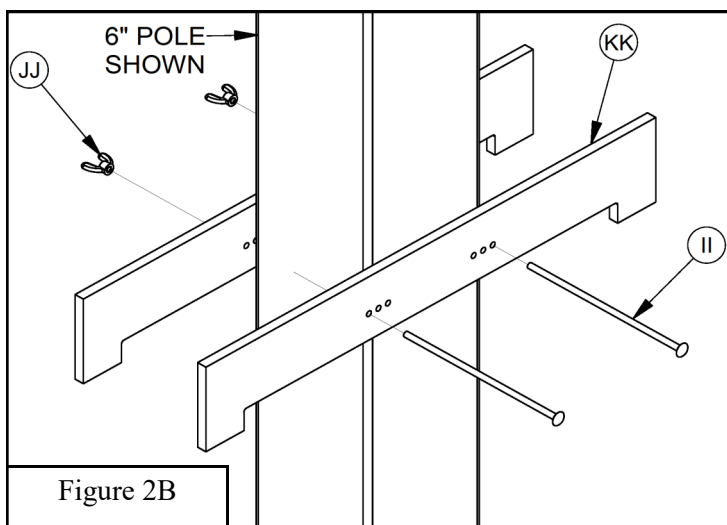


Figure 2B

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 8'6" (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.

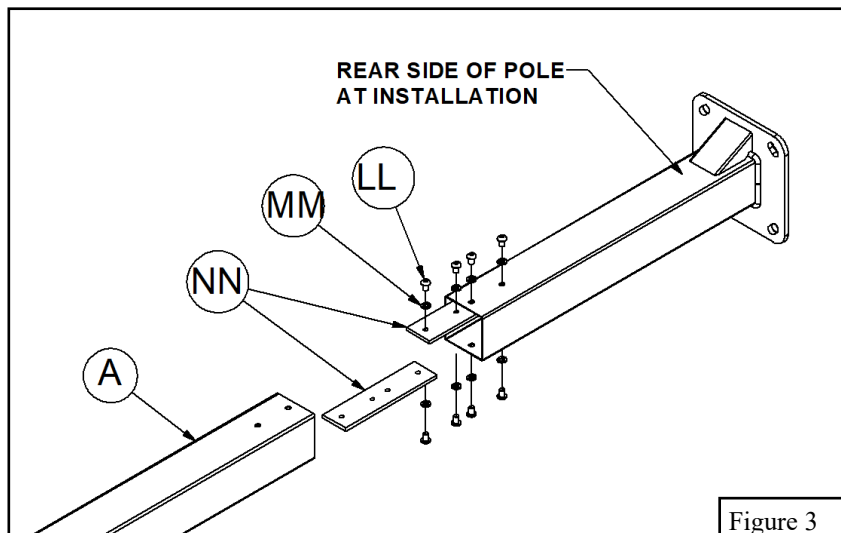
Owner must ensure that all players know and follow these rules for safe operation of the system.

- 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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**IF YOU ARE INSTALLING A REMOVABLE PEDESTAL MOUNT SYSTEM
(BA9350X OR BA9350SX)**

- 4b. 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 3.
- 5b. Using the 1/2" *Button Head Screws* (LL) and 1/2" *Lock Washers* (MM), loosely attach two *Pole Connector Bars* (NN) to the inside of the end of the lower *Pole Section* (A). See Figure 3.
- 6b. Slide the other *Pole Section* (A) over the two *Pole Connector Bars* (NN) up against the partially assembled *Pole Section* (A). See Figure 3.
- 7b. Using the remaining 1/2" *Button Head Screws* (LL) and 1/2" *Lock Washers* (MM), attach the upper *Pole Section* (A) to the *Pole Connector Bars* (NN). See Figure 3.
- 8b. Tighten all 1/2" *Button Head Screws* (LL) 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 (LL) need to be on the rear and the front of the pole not the side for maximum rigidity.

- 9b. 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 4.
- 10b. Prepare the "J" Bolt assembly by first threading a 5/8" *Hex Nut* (SS) onto each "J" *Bolt* (PP) so that approximately 2-1/2" of thread is protruding above the nut. Place the threaded end of each "J" *Bolt* (PP) through the four holes in the *Template* (RR). Thread a second 5/8" *Hex Nut* (SS) onto each "J" *Bolt* (PP) on the top side of the *Template* (RR). Tighten the nuts on both sides of the *Template* (RR), making sure that the same length of "J" *Bolt* (PP) (2" minimum) is protruding above the *Template* (RR) in all four corners and that the "J" *Bolt* (PP) "legs" are pointing toward the center of the *Template* (RR). See Figure 4.
- 11b. 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.
- 12b. A 20" diameter by 36" deep hole, with additional soil removed from the bottom 1/3, will require approximately twenty 60 lb. bags of *Premix Concrete* (GG). 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.

- 13b. 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 (SS).
- 14b. 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.
- 15b. Drop the *Rebar* (QQ) into the wet concrete to help support the concrete footing.
- 16b. Insert the "J" bolt assembly into the wet concrete. Be sure the *Template* (RR) 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 (PP). Be sure the *Template* (RR) 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 4.
- 17b. Clean excess concrete from edge of hole and level the concrete from the edge of the *Template* (RR) to the edge of the hole. **Allow concrete to cure for 4 days.**

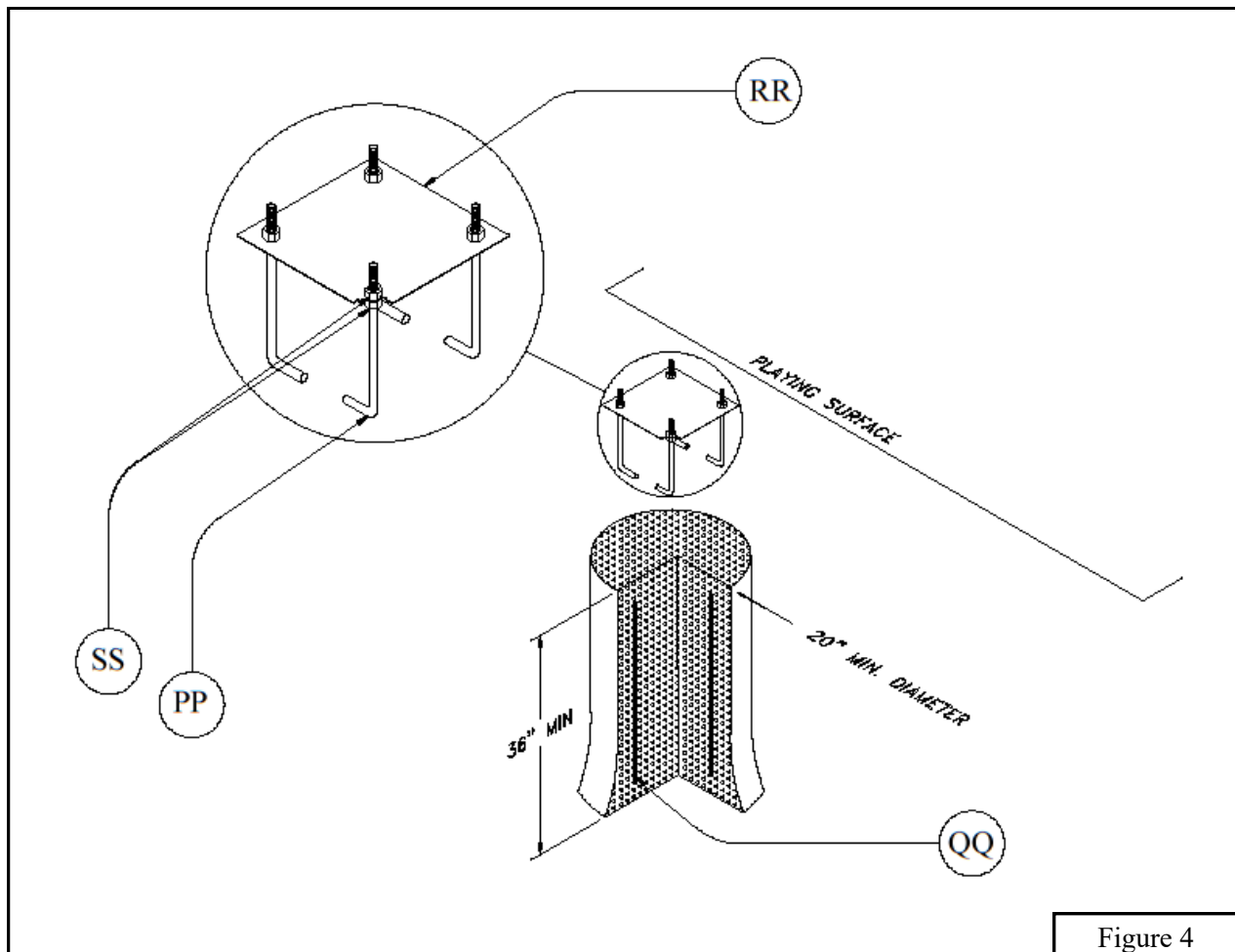


Figure 4

- 18b. Once the concrete is cured you may now remove the upper 5/8" *Hex Nuts* (SS) from the "*J*" *Bolts* (PP) and remove and discard the *Template* (RR).
- 19b. Place the 5/8" *Hex Nuts* (SS) you just removed back on each "*J*" *Bolt* (PP) and finger tighten against the nut that is embedded in the concrete footing. Install one 5/8" *Flat Washer* (UU) on top of each 5/8" *Hex Nut* (SS). See Figure 5.
- 20b. Install the base of the pole assembly over the "*J*" *Bolts* (PP) with the rear support gusset or the side of the pole opposite the court. Place 5/8" *Flat Washers* (UU), 5/8" *Lock Washers* (TT) and 5/8" *Hex Nuts* (SS) on "*J*" *Bolts* (PP) above the pole base to tighten base down. You can level pole if needed by adjusting the 5/8" *Hex Nuts* (SS) above and below the base plate. Make sure all hardware is tight once leveled. Press "*J*" *Bolt Safety Caps* (VV) over the exposed ends of "*J*" *Bolts* (PP). You are now ready to finish the installation of your basketball system. See Figure 5.
- 21b. **Install the *Warning Label* (WW) at eye level on the rear of the pole.**

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

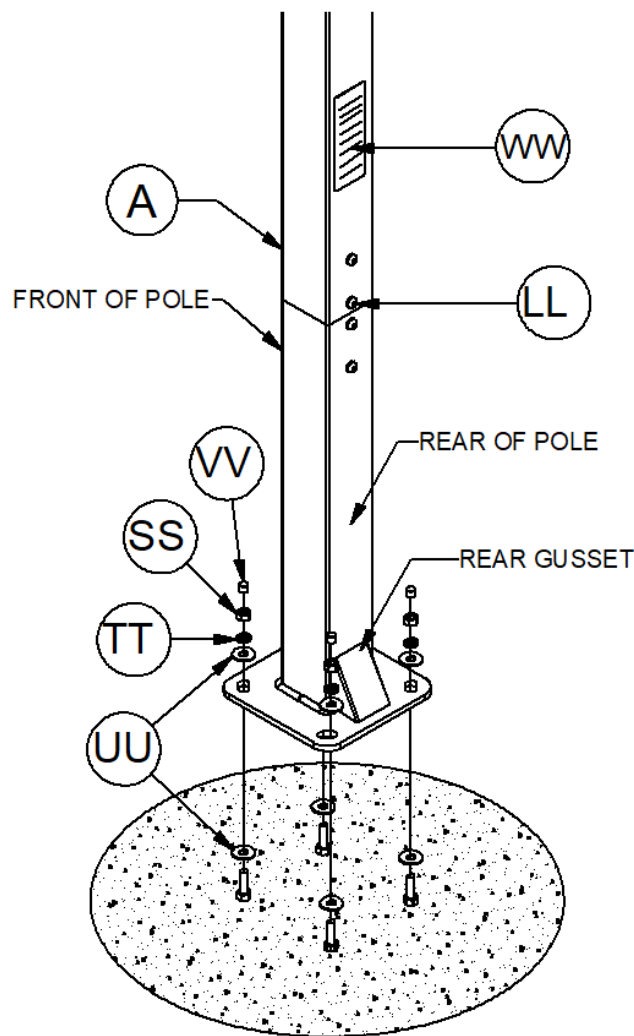
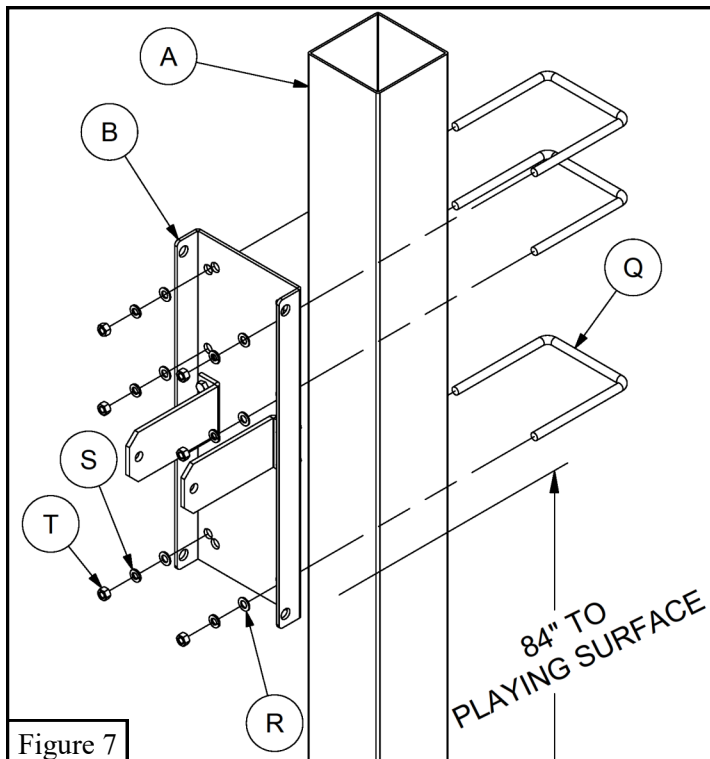
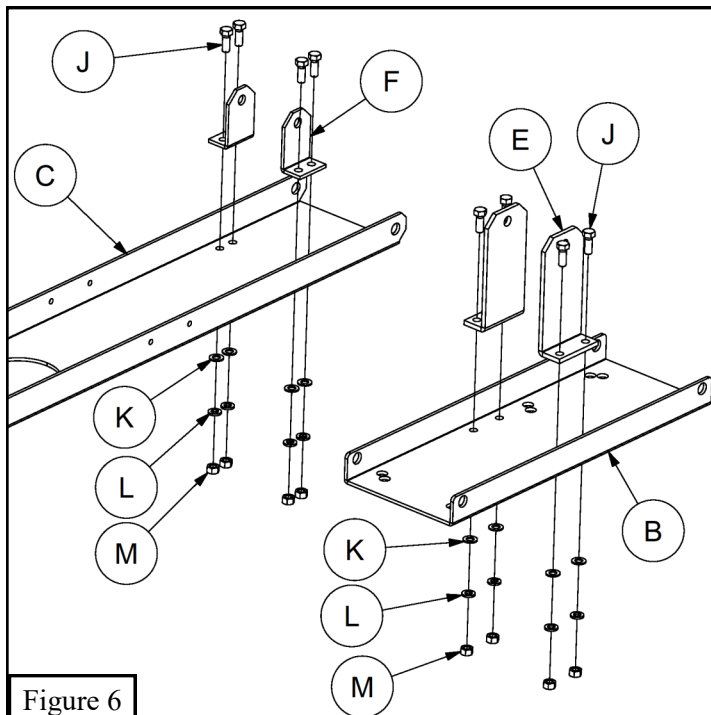


Figure 5

23. Using a marker or masking tape, mark the pole assembly 84" above the actual playing surface. See Figure 2A.
24. Using $\frac{3}{8}$ " x 1" Hex Bolts (J), $\frac{3}{8}$ " Flat Washers (K), $\frac{3}{8}$ " Lock Washers (L) and $\frac{3}{8}$ " Hex Nuts (M) attach the two Pole Plate Brackets (E) to the Pole Plate (B) and the two Extension Channel Brackets (F), to one of the Extension Channels (C). Do not tighten at this time. See Figure 6.
25. Using the three Square U-Bolts (Q), $\frac{1}{2}$ " Flat Washers (R), $\frac{1}{2}$ " Lock Washers (S) and $\frac{1}{2}$ " Hex Nuts (T) attach the Pole Plate (B) to the pole assembly with the bottom surface of the Pole Plate (B) in line with the 84" mark on the pole assembly. Placement of the extension arm assembly lower than this is not recommended as it increases the risk of injury to young players. Tighten all nuts when Pole Plate (B) is level. See Figure 7.

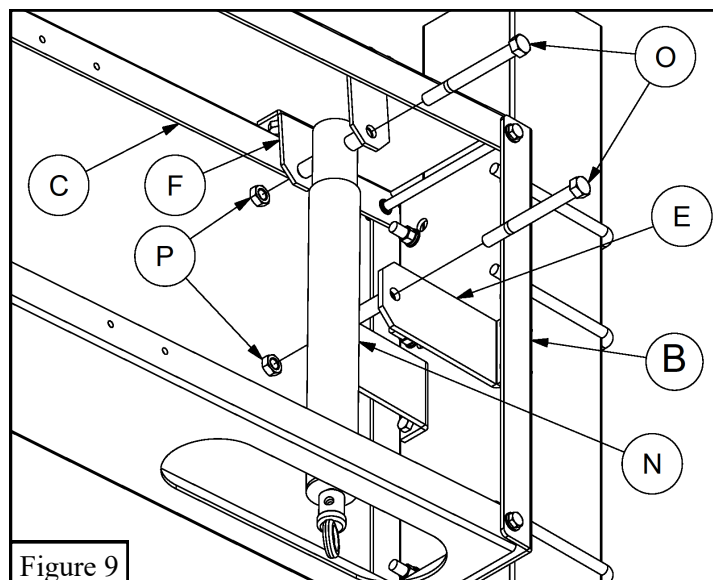
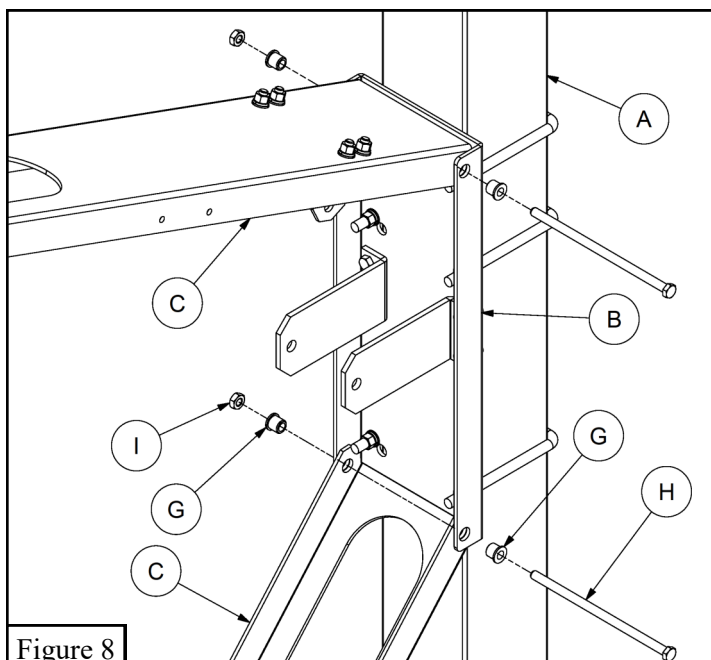


26. Using *Pivot Bushings (G)*, *3/8" x 8" Hex Bolts (H)* and *3/8" Thin Lock Nuts (I)* attach the lower *Extension Channel (C)* to the *Pole Plate (B)*. Tighten the *3/8" Thin Lock Nut (I)* and then reverse 1/2 turn to ensure the *Extension Channel (C)* can move freely. See Figure 8.

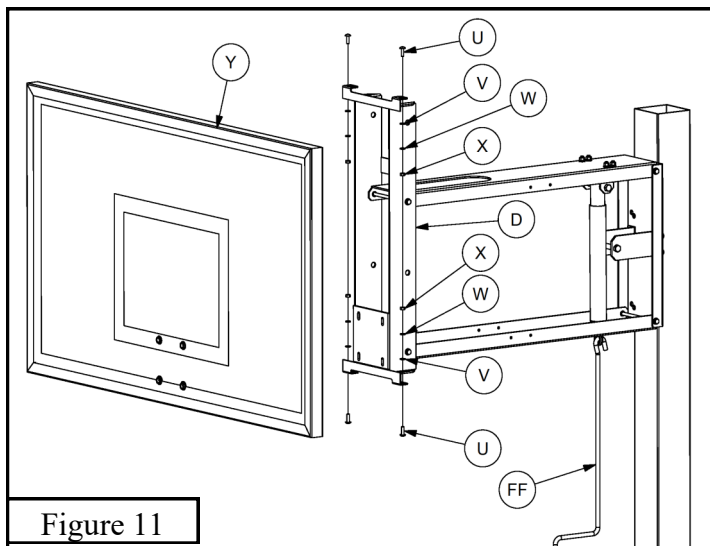
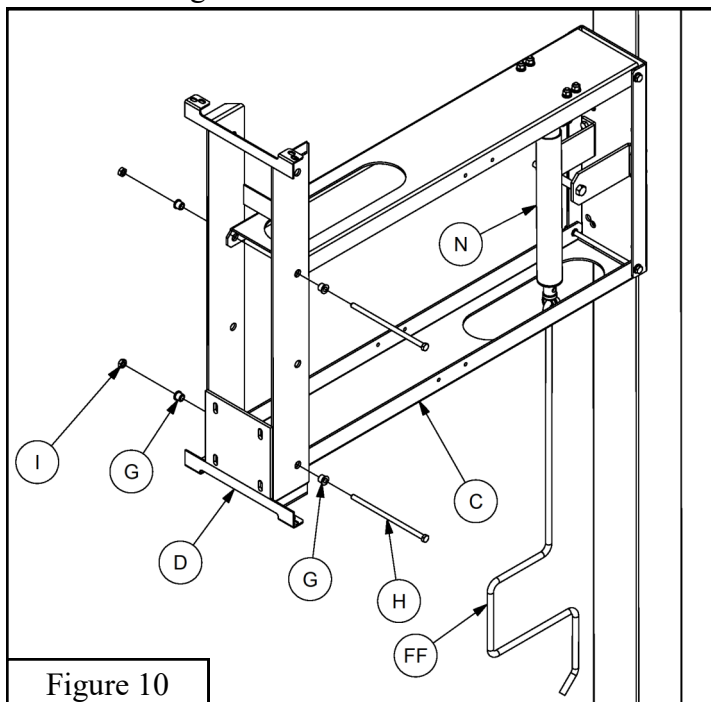
Note visual difference between the 3/8" Thin Lock Nuts (I) and the 3/8" Hex Nuts (M). Using wrong 3/8" nuts could result in system failure and player injury.

27. Repeat the process in #26 above installing the upper *Extension Channel (C)* with the previously attached *Extension Channel Brackets (F)* to the top of the *Pole Plate (B)*. See Figure 8.
28. Install the *Crank (N)* to the *Pole Plate Brackets (E)* and the *Extension Channel Brackets (F)* previously installed in #24 above using *1/2" x 5" Hex Bolts (O)* and *1/2" Thin Lock Nut (P)*. Tighten the *3/8" x 1" Hex Bolts (J)* and *3/8" Hex Nuts (M)* installed in #24 above. Tighten the *1/2" x 5" Hex Bolts (O)* and *1/2" Thin Lock Nuts (P)* then reverse 1/2 turn to ensure *Crank (N)* can move freely within the mounting brackets. See Figure 9.

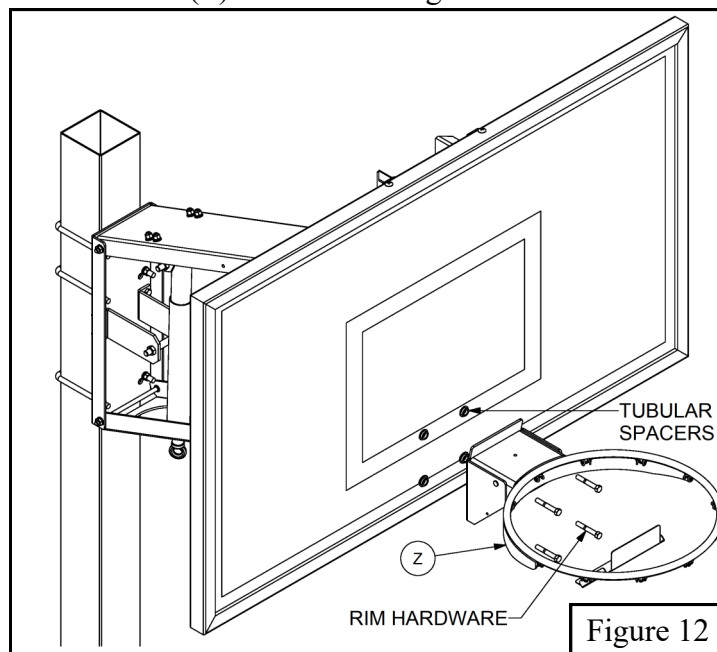
Note difference between the 1/2" Hex Nuts (T) and 1/2" Thin Lock Nut (P). Do not use wrong nuts as this may cause system failure and player injury.

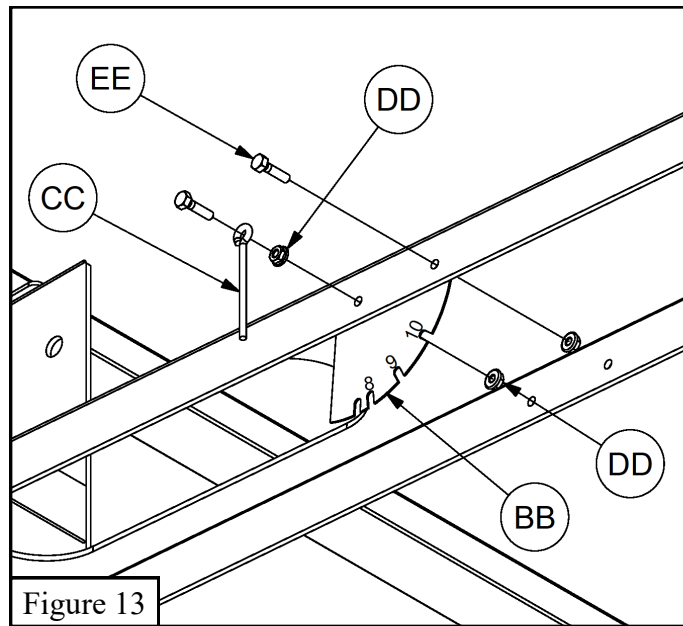


29. Attach the *Backboard "H" Frame (D)* to the upper and lower *Extension Channels (C)* using *Pivot Bushings (G)*, *3/8" x 8" Hex Bolts (H)* and *3/8" Thin Lock Nuts (I)*. Tighten the *3/8" Thin Lock Nuts (I)* and then reverse 1/2 turn to allow free movement. See Figure 10.
30. Using the *Crank Handle (FF)* attempt to raise and lower the *Backboard "H" Frame (D)* by placing the hook on the end of the *Crank Handle (FF)* in the eye on the *Crank (N)* and rotate. If the extension arm assembly doesn't move freely, make sure all pivot points are free by loosening the lock nuts.
31. Using the *Crank Handle (FF)* lower the *Backboard "H" Frame (D)* to its lowest position. Carefully position the *Backboard (Y)* resting on the front of the *Backboard "H" Frame (D)*. Attach the *Backboard (Y)* to the *Backboard "H" Frame (D)* using four *5/16" x 1" Truss Head Screws (U)*, *5/16" Flat Washers (V)*, *5/16" Lock Washers (W)* and *5/16" Hex Nuts (X)*. Tighten all 5/16" fasteners. See Figure 11.



32. Install the *Rim (Z)* with the hardware provided with the *Rim (Z)*. Make sure that the tubular spacers are installed in the 4 holes in the glass to keep the rear of the *Rim (Z)* from contacting the glass. Tighten all rim mounting bolts when the *Rim (Z)* is level. See Figure 12.





33. Attach *Height Gauge* (BB) to the top *Extension Channel* (C) with one $\frac{1}{4}$ " x 1" *Hex Bolt* (EE) and $\frac{1}{4}$ " *Flange Nut* (DD) in the back mounting hole. Slide the *Pointer* (CC) onto one $\frac{1}{4}$ " x 1" *Hex Bolt* (EE) then install one $\frac{1}{4}$ " *Flange Nut* (DD) against the *Pointer* (CC) with just enough slack to let the *Pointer* (CC) rotate freely on the $\frac{1}{4}$ " x 1" *Hex Bolt* (EE). Pass this assembly through the mounting holes in the *Extension Channel* (C) and tighten with the remaining $\frac{1}{4}$ " *Flange Nut* (DD). You must tighten the $\frac{1}{4}$ " *Flange Nuts* (DD) against each other to lock this assembly in place, if you tighten the $\frac{1}{4}$ " x 1" *Hex Bolt* (EE) you will also tighten the assembly against the *Pointer* (CC). The *Pointer* (CC) must rotate freely on the $\frac{1}{4}$ " x 1" *Hex Bolt* (EE) once installed to accurately indicate your rim height. The *Height Gauge* (BB) can be adjusted by loosening the $\frac{1}{4}$ " x 1" *Hex Bolts* (EE) to align the *Pointer* (CC) with the 10' mark when *Rim* (Z) measures 10' from the playing surface. See Figure 13.
34. Install the *Pole Cap* (AA), the *Net* (Z) and the *Pole Padding* (HH) if applicable.
35. You are now ready for play.

Warning!
***Crank Handle* (FF) must be removed and stored before playing. The crank handle will be a safety hazard to the playing area.**