

# — Installation and Safe Use Manual —

## For BA871, BA871XL, BA873, BA873U, BA874, BA872, BA872XL



Customer Service  
(800) 247-7668

| PARTS LIST |     |                                                                                                         |      |     |                                                                                             |
|------------|-----|---------------------------------------------------------------------------------------------------------|------|-----|---------------------------------------------------------------------------------------------|
| Item       | Qty | Description                                                                                             | Item | Qty | Description                                                                                 |
| A          | 2   | Pole Section                                                                                            | R    | 4   | 3/8" Flat Washer (8 required on double sided systems, not required on all systems) - FT1950 |
| B          | 1   | Pedestal Base Pole (if applicable)                                                                      | S    | 4   | 3/8" Lock Washer (8 required on double sided systems, not required on all systems) - FT1960 |
| C          | 1   | Extension Arm (2 required on double sided systems)                                                      | T    | 1   | Pole Cap - PC1225                                                                           |
| D          | 1   | Extension Arm Mounting Plate (not required on double sided systems)                                     | U    | 1   | Pole Pad (optional on some systems)                                                         |
| E          | 6   | 5/8" x 8" Hex Bolt - FT1854                                                                             | V    | 8   | 1/2" x 3/4" Button Head Screw - FT1742                                                      |
| F          | 6   | 5/8" Hex Nut ( 18 if pedestal base pole) - FT1140                                                       | W    | 8   | 1/2" Lock Washer - FT2028                                                                   |
| G          | 6   | 5/8" Flat Washer (14 if pedestal base pole) - FT2040                                                    | X    | 2   | Pole Connector Bar                                                                          |
| H          | 6   | 5/8" Lock Washer (10 if pedestal base pole) - FT2050                                                    | Y    | TBD | Premix Concrete                                                                             |
| I          | 8   | 3/8" x 1 1/2" Spring Pin - FT1010                                                                       | Z    | 2   | 1/4" x 8" Carriage Bolt - FT1084                                                            |
| J          | 1   | Backboard (model depends on system, 2 required on double sided systems)                                 | AA   | 2   | 1/4" Wing Nut - FT1085                                                                      |
| K          | 1   | Rim with Net (model depends on system, 2 required on double sided systems)                              | BB   | 2   | Predrilled Wooden Panel                                                                     |
| L          | 1   | Rim Mounting Hardware (included with rim)                                                               | CC   | 1   | 5/16" Hex Key - PC3533                                                                      |
| M          | 2   | 7/16" x 1 1/2" Carriage Bolt (4 required on double sided systems, not required on all systems) - FT1722 | DD   | 4   | "J" Bolt - PC1670 (if applicable)                                                           |
| N          | 2   | 7/16" Flat Washer (4 required on double sided systems, not required on all systems) - FT2000            | EE   | 4   | 36" Rebar (if applicable)                                                                   |
| O          | 2   | 7/16" Lock Washer (4 required on double sided systems, not required on all systems) - FT2010            | FF   | 1   | Template (if applicable)                                                                    |
| P          | 2   | 7/16" Hex Nut (4 required on double sided systems, not required on all systems) - FT1090                | GG   | 4   | J-Bolt Safety Cap (If applicable)                                                           |
| Q          | 4   | 3/8" Hex Nut (8 required on double sided systems, not required on all systems) - FT1080                 | HH   | 1   | Warning Label                                                                               |

### Warning!!!

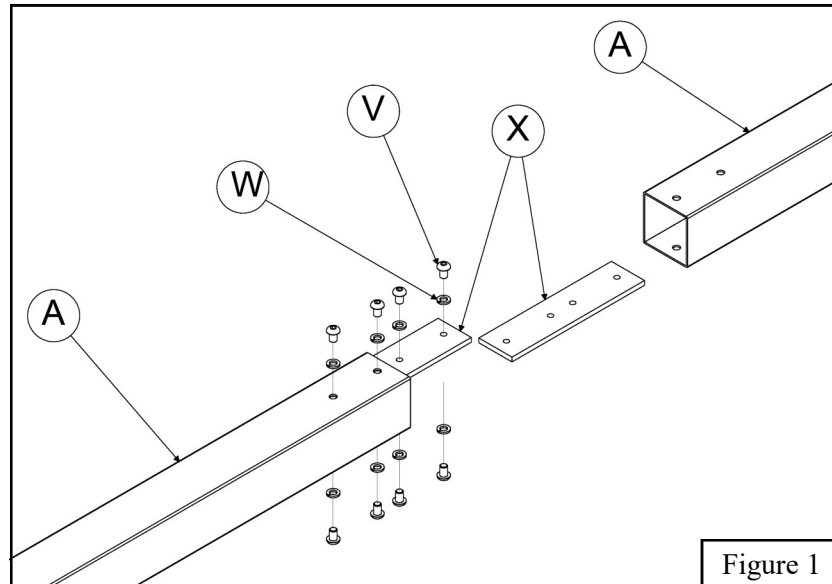
Improper installation, maintenance or use may cause product failure and serious personal injury.

- ♦ 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

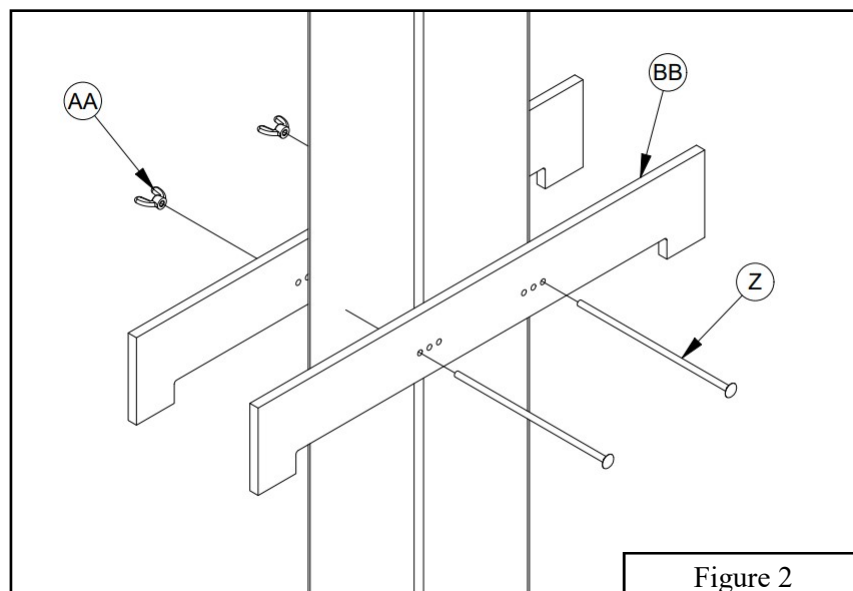
1. Call your local utility locating service before digging, usually by dialing 811, to avoid serious injury or service interruptions. Also avoid lawn sprinkler lines.

### 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* (X) to one of the *Pole Sections* (A) using  $1/2"$  x  $3/4"$  *Button Head Screws* (V),  $1/2"$  *Lock Washers* (W) and  $5/16"$  *Hex Key* (CC). Connect second *Square Pole Section* (A) loosely. Tighten all  $1/2"$  x  $3/4"$  *Button Head Screws* (V) 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.



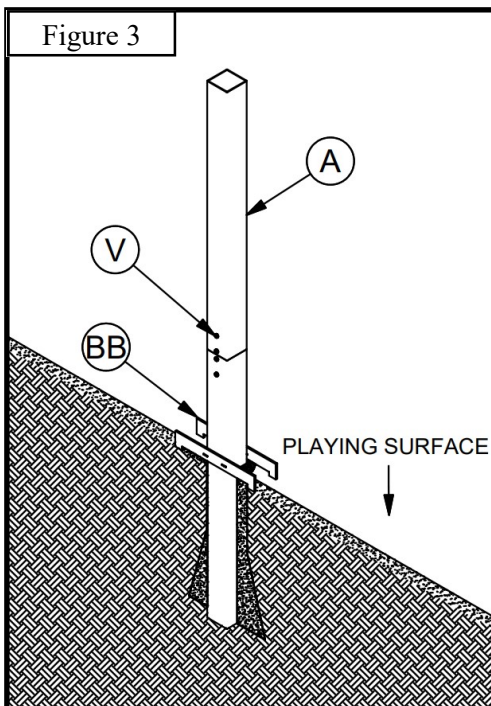
- 3a. Determine the position of the pole assembly by taking into account that the distance between the front of the pole assembly and the face of the backboard is approximately 60" (72" on XL Systems). See Figure 6.
- 4a. Dig a hole that is a minimum of 12" diameter and 40" deep, deeper in heavy frost areas. Remove dirt in the bottom 1/3 of the hole in a bell shape to improve pole stability. The amount of *Premix Concrete* (Y) 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* (Y). Always better to have too much rather than too little on site. See Figure 6.



- 5a. Using the two  $1/4"$  x  $8"$  Carriage Bolts (Z) and  $1/4"$  Wing Nuts (AA), sandwich the *Predrilled Wood Panels* (BB) 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* (Z-BB) 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* (Y) dry.

**WARNING: FAILURE TO FOLLOW 7a BELLOW WILL RESULT IN THE POLE LEANING FORWARD AT THE JOINT.**

- 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 (V) are on the back side of the pole assembly, One set is on the front side and the front face of the pole assembly is square to the playing surface. See Figure 3.
- 8a. While the concrete is still wet, and the pole assembly is movable, adjust the *Installation Aid* (Z-BB) on the pole assembly to help maintain the top of the pole at 96" from the playing surface, plumb in both directions, and with the front face of the pole parallel to the court. See Figure 6.
- 9a. **ALLOW AT LEAST 4 DAYS FOR CONCRETE TO CURE BEFORE COMPLETING THE INSTALLATION TO AVOID FOOTING FAILURE. Install *Warning Label* (HH) 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.**
- 10a. 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.
- 11a. Discard the *Installation Aid* (Z-BB) once footing is cured.
- 12a. Proceed to #16. **TO CONTINUE INSTALLATION**



**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**

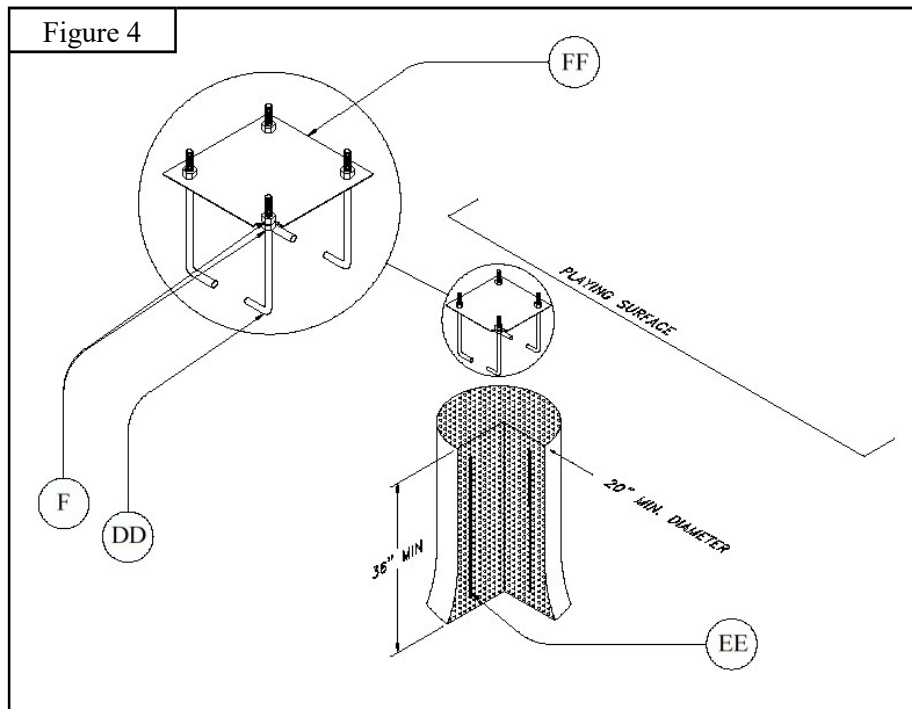
FAILURE TO FOLLOW THESE WARNINGS MAY RESULT IN SERIOUS INJURY AND/OR PROPERTY DAMAGE. Owner must ensure that all players know and follow these rules for safe operation of the system.

- 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/face 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.

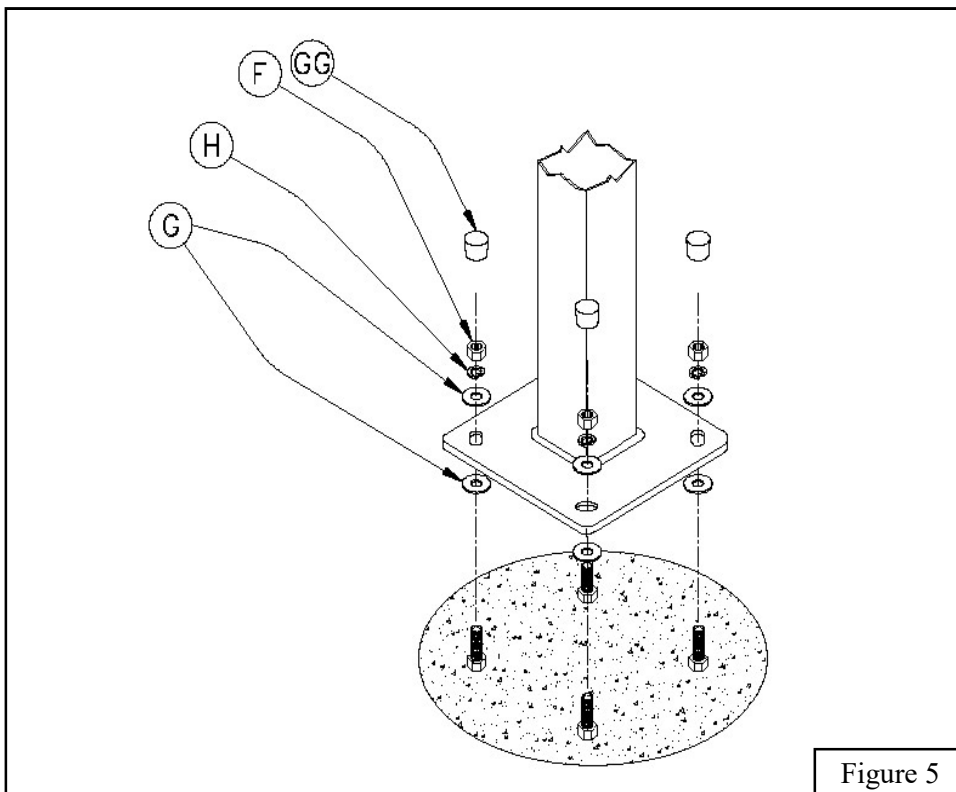
BISON, INC. 1-800-247-7668 BA730

## IF YOU ARE INSTALLING A REMOVABLE PEDESTAL MOUNT SYSTEM

- 2b. 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.
- 3b. Prepare the "J" Bolt assembly by first threading a  $\frac{5}{8}$ " Hex Nut (F) onto each "J" Bolt (DD) so that approximately 2-1/2" of thread is protruding above the nut. Place the threaded end of each "J" Bolt (DD) through the four holes in the Template (FF). Thread a second  $\frac{5}{8}$ " Hex Nut (F) onto each "J" Bolt (DD) on the top side of the Template (FF). Tighten the nuts on both sides of the Template (FF), making sure that the same length of "J" Bolt (DD) (2" minimum) is protruding above the Template (FF) in all four corners and that the "J" Bolt (DD) "legs" are pointing toward the center of the Template (FF). See Figure 4.
- 4b. 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.
- 5b. 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 (Y). 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.
- 6b. 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  $\frac{5}{8}$ " Hex Nuts (F).



- 7b. 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.
- 8b. Drop four 36" Rebar (EE) into the wet concrete to help support the concrete footing.
- 9b. Insert the "J" bolt assembly into the wet concrete. Be sure the *Template* (FF) 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 (DD). Be sure the *Template* (FF) is pressed firmly against the surface of the wet concrete. The top of the concrete footing should be flush with the playing surface.
- 10b. Clean excess concrete from edge of hole and level the concrete from the edge of the *Template* (FF) to the edge of the hole. **Allow concrete to cure for 4 days.**
- 11b. Once the concrete is cured you may now remove the upper 5/8" Hex Nuts (F) from the "J" Bolts (DD) and remove and discard the *Template* (FF).
- 12b. Place the 5/8" Hex Nuts (F) you just removed back on each "J" Bolt (DD) and finger tighten against the nut that is embedded in the concrete footing. Install one 5/8" Flat Washer (G) on top of each 5/8" Hex Nut (F). See Figure 5.
- 13b. Install the *Pedestal Base Pole* (B) over the "J" Bolts (DD). Place 5/8" Flat Washers (G), 5/8" Lock Washers (H) and 5/8" Hex Nuts (F) on "J" Bolts (DD) above the pole base to tighten base down. You can level pole if needed by adjusting the 5/8" Hex Nuts (F) above and below the base plate. Make sure all hardware is tight once leveled. Press "J" Bolt Safety Caps (GG) over the exposed ends of "J" Bolts (DD). See Figure 5.
- 14b. **Install the *Warning Label* (HH) at eye level on the rear of the pole.**
- 15b. Proceed to #16. **TO CONTINUE INSTALLATION**



16. Using a marker or masking tape, mark the pole assembly 81" (82 1/2" on XL Systems or 83 1/2" on BA873 Systems) above the final playing surface. See Figure 7.
17. Drive four 3/8" x 1 1/2" *Spring Pins* (I) into both the *Extension Arm* (C) and the *Extension Arm Mounting Plate* (D). See Figure 6.
18. With the 3/8" x 1 1/2" *Spring Pins* (I) extending toward the pole, attach the *Extension Arm* (C) to the *Extension Arm Mounting Plate* (D) using 5/8" x 8" *Hex Bolts* (E), 5/8" *Hex Nuts* (F), 5/8" *Flat Washers* (G), and 5/8" *Lock Washers* (H) with the **bottom** of the mounting plate on the *Extension Arm* (C) in line with the appropriate mark on the pole. Tighten all 5/8" hardware when the *Extension Arm* (C) pole mounting plate is level. See Figure 6.
19. If installing a double-sided system, a second *Extension Arm* (C) is used instead of the *Extension Arm Mounting Plate* (D), but with the same hardware.

**IF YOU ARE INSTALLING A BA871, BA871XL, BA872, or BA872XL SYSTEM**

- 20x. Loosely attach the *Backboard* (J) to the previously installed *Extension Arm* (C) using the 7/16" hardware (M)(N), (O), and (P). See Figure 6.
- 21x. Proceed to #23. **TO COMPLETE INSTALLATION**

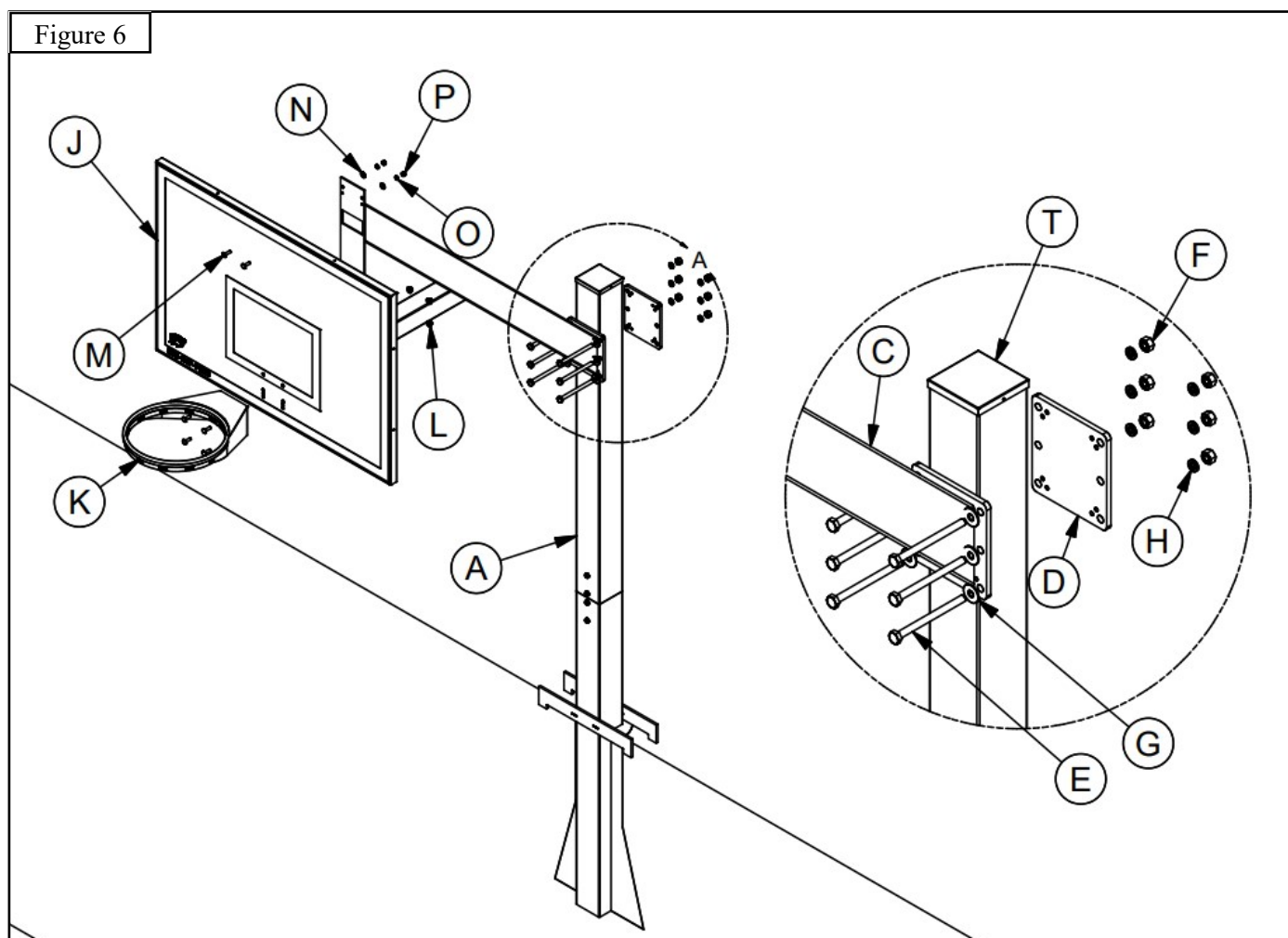
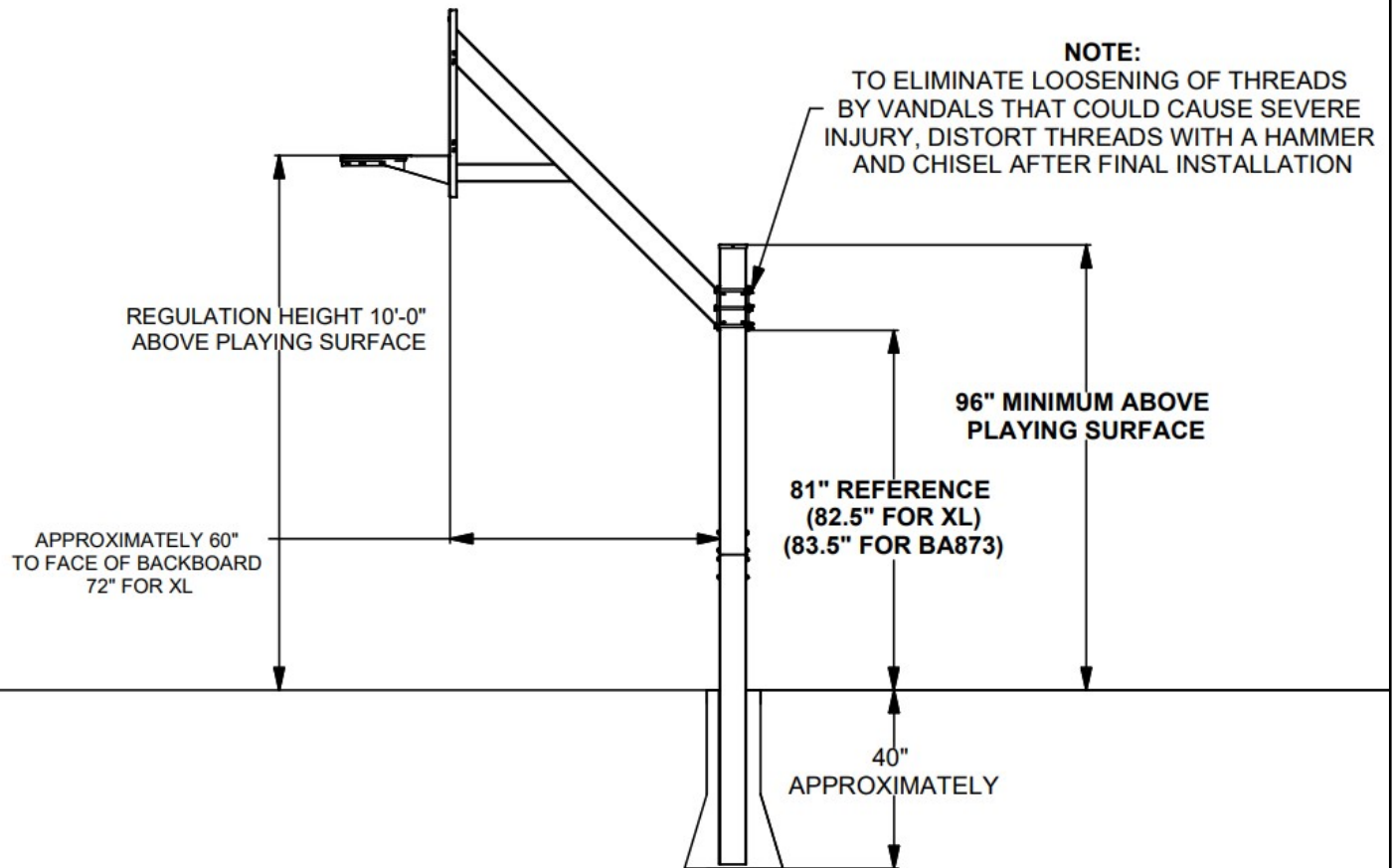
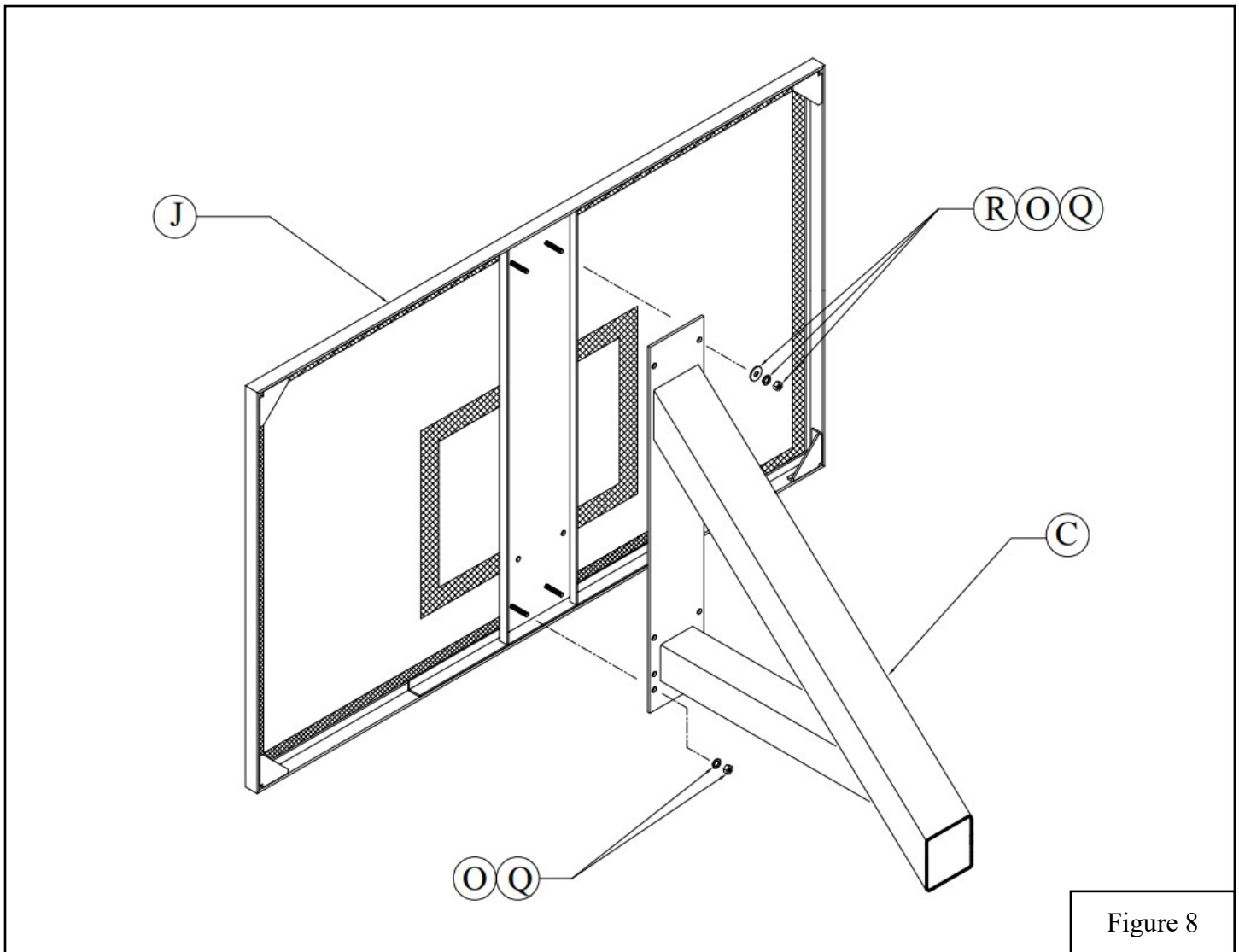


Figure 7



## IF YOU ARE INSTALLING A BA873, BA873U or BA9873 SYSTEM

- 20y. Remove the  $\frac{3}{8}$ " Hex Nuts (Q),  $\frac{3}{8}$ " Flat Washers (R) and  $\frac{3}{8}$ " Lock Washers (O) that are preinstalled on the  $\frac{3}{8}$ " threaded studs on the BA42RG and BA42RGU Backboard (J).
- 21y. Align the  $\frac{3}{8}$ " threaded studs on the backboard frame with the hole in the *Extension Arm* (C). Loosely reinstall the  $\frac{3}{8}$ " flat washers, lock washers, and hex nuts. See Figure 8
- 22y. Proceed to #23. **TO COMPLETE INSTALLATION**



23. Install the *Rim* (K) using *Rim Mounting Hardware* (L).
24. Tighten rim and backboard hardware only when the backboard and rim are level.
25. Measure the rim height and adjust if necessary to official 10' height by carefully loosening the  $\frac{5}{8}$ " *Extension Arm* (C) mounting hardware.
26. Install the *Net* (K) and *Pole Cap* (T). Install *Pole Pad* (U) and backboard padding (if applicable).
27. You are now ready to play.