IRONCLAD SPORTS, INC HIGHLIGHT HOOPS

ADJUSTABLE BASKETBALL SYSTEM
ASSEMBLY INSTRUCTIONS AND OWNER'S MANUAL

MODEL: HIL664



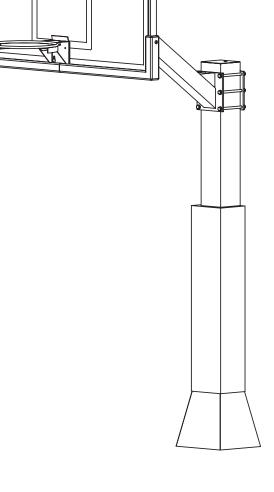
WARNING



FAILURE TO COMPLY WITH ANY OF THE WARNINGS IN THESE INSTRUCTIONS MAY RESULT IN SERIOUS PERSONAL INJURY.

FAILURE TO COMPLY MAY ALSO RESULT IN PROPERTY DAMAGE. PLEASE HEED ALL WARNINGS AND CAUTIONS TO ENSURE YOUR SAFETY.

DO NOT ATTEMPT TO ASSEMBLE THIS SYSTEM WITHOUT CAREFULLY READING AND FOLLOWING ALL INSTRUCTIONS. BEGIN BY IDENTIFYING AND TAKING INVENTORY OF ALL PARTS USING THE PARTS LIST PROVIDED.



IRONCLAD SPORTS, INC 902 Corey Road, Hutchinson, KS 67501 Telephone: 620-662-2233 www.ironcladsports.com

Keep this instruction manual in case you have to contact the manufacturer for replacement parts.

TOOLS AND MATERIALS REQUIRED FOR ASSEMBLY (Not Included)

- 1. 2 Adjustable Wrenches
- 2. Socket Set
- 3. 9/16" Wrench
- 4. 3/4" Wrench
- 5. 15/16" Wrench
- 6. ½" Wrench
- 7. Hammer or Mallet
- 8. Tape Measure
- 9. Shovel

- 10. Concrete-1/2 yard or 14-16 Bags, (80 lb. bags)
- 11. Phillips Head Screwdriver
- 12. A minimum of 2 Ladders
- 13. Carpenter's Level
- 14. Water Supply

A MINIMUM OF SIX ADULTS IS REQUIRED TO LIFT UNIT INTO PLACE



BEFORE YOU START



- A. Identify and inventory all parts using the checklist boxes in the parts list. Be sure to keep the hardware bags and their contents separate. If any parts are missing call our Customer Service Department (620-662-2233).
- B. Test fit all Bolts by inserting them into the respective hole. If necessary, carefully scrape away any excess powder coating buildup from inside the holes. Do not scrape away all of the powder coating. Bare metal may rust.



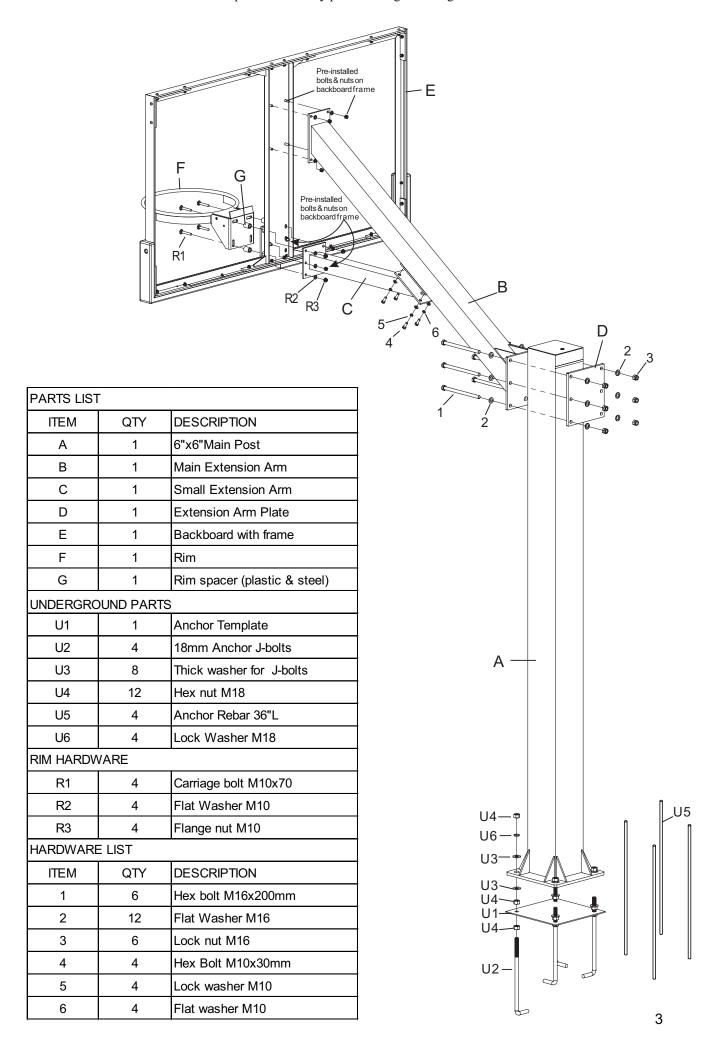
SAFETY INSTRUCTIONS



FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE AND WILL VOID THE WARRANTY. The owner must ensure that all players know and follow these rules to safely operate the system. Proper and complete assembly, use and supervision is essential for proper operation and to reduce the risk of accident or injury. A high probability of serious injury exists if this system is not installed, maintained, or operated properly.

• If using a ladder during assembly, use extreme caution. Follow all warnings and cautions on the ladder carefully. • 6 people are required to lift the unit into place. • Before digging, contact the appropriate agency to locate underground power cables, gas, and water lines. Do not install the system within 20 feet of overhead power lines. • Climate, corrosion, or misuse could result in system failure. • If technical assistance is required, contact the manufacturer. • Minimum operational height is 7'6" to the Rim. Most injuries are caused by misuse and /or failure to follow instructions. Use caution when using the system.

Verify all parts listed on packing list are present prior to installation. Contact our Customer Service at 620-662-2233 for assistance with replacement of any parts missing or damaged.



NOTE: Before digging, call to locate any buried utility lines.

NOTE: At rim height 10° , distance from the face of backboard to the front of Main Post(A) is 48° , Choose the proper location to dig for the concrete footing:

a. Dig a hole 48" deep and 21"x 21"square. The edge of the hole should be flush with the edge of the playing surface. If you live in an area where heavy frost can occur, it may pose a problem, consult your local building inspector to determine the appropriate hole depth.

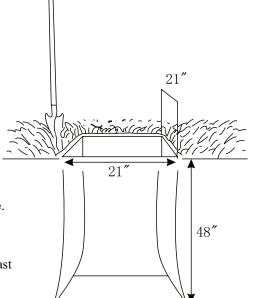
NOTE: The hole must be at least 48" deep.

- b. Build a form before pouring the concrete pad, to ensure that the top
 of the concrete remains straight and square. The form should
 be placed about 1/2" above the playing surface to allow for water drainage.
- c. Bell out the bottom of the hole.

NOTE: A square hole prevents the rotation of the concrete.

NOTE: The area behind the playing surface must be cleared off by at least

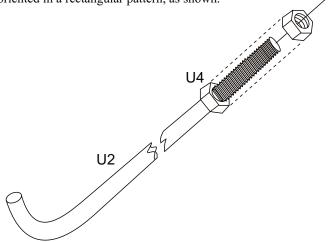
3 feet to enable the user to stand behind the pole to adjust the Rim height.

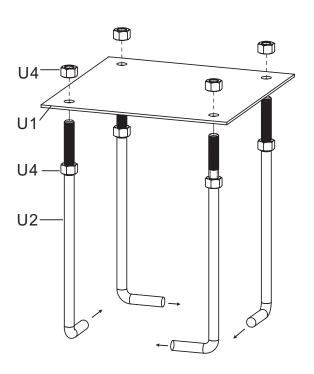


STEP B

- A. Thread a 18mm Hex Nut (U4) onto each of the 18mm J-Bolts (U2). Securely tighten the Nuts all the way down to the end of the threads.
- B. Slide the threaded end of the J-Bolts through the holes in the Anchor Template (U1) and secure each J-Bolt with a 18mm J-Bolt Hex Nuts(U4) as shown. Securely tighten all Nuts at this time.

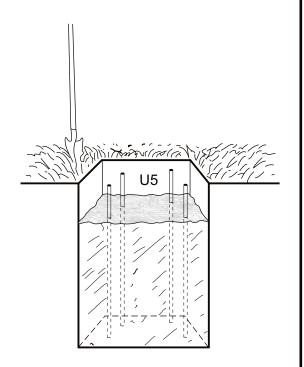
NOTE: Make sure the curved "J" ends of the J-Bolts are oriented in a rectangular pattern, as shown.





STEP C

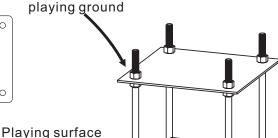
- a. Mix the concrete according to the instructions on the bags. Note that a thicker mix of concrete will dry stronger than a thin mix. Pour the concrete into the hole, stopping approximately 18 inches from the top of the hole.
- b. Insert the four pieces of Anchor Rebar (U5) into the hole, pushing each piece firmly to the bottom of the hole. The four pieces should be arranged in a square approximately 8 inches wide so that each piece of rebar will be positioned next to the J-Bolts when the J-Bolt Template is placed in the cement.
- c. Finish filling the hole to the top with concrete. The top of the concrete should reach just above the level of the top of the form.





Edge of playing surface





This side faces

(Front side)

STEP D

- a. Position the J-Bolt Template (U1) over the hole as shown. with the sides of the plate square with the sides of the hole.
- b.Push the J-Bolts (U2) into the concrete until the J-Bolt Template is resting flat against the surface of the concrete.
- c. Grasp the tops of the J-Bolts and agitate the Template assembly back and forth repeatedly to eliminate any air bubbles in the concrete. Lift the Template slightly above the concrete when agitating. Make sure the Template is resting on the concrete after agitating. Form the concrete into a downward slope away from the Pole to allow water runoff.
- d. Clean off any concrete that may be on the J-Bolt Template or the exposed portions of the J-Bolts.
- e. Using a carpenter's level, make sure the Template is square to and level with the playing surface.
- f. Allow the concrete to cure for a minimum of 5-7 days before installing the rest of your basketball system. In cold , wet weather or humid climates, allow additional time for the concrete to cure.

YOU ARE NOW FINISHED WITH THE INITIAL ASSEMBLY STEPS. DO NOT PROCEED WITH THE ASSEMBLY UNTIL THE CONCRETE HAS FULLY CURED. CURING WILL TAKE A MINIMUM OF 72 HOURS. IN HUMID CLIMATES OR WET WEATHER, ALLOW ADDITIONAL TIME FOR THE CONCRETE TO CURE.



WARNING



NEVER USE THE SYSTEM WITHOUT FOLLOWING THE CEMENTING INSTRUCTIONS. FAILURE TO FOLLOW ALL OF THESE INSTRUCTIONS AND WARNINGS COULD LEAD TO SERIOUS PERSONAL INJURY OR PROPERTY DAMAGE AS LISTED ON PAGE ONE.



WARNING



BECAUSE OF THE SIZE AND WEIGHT OF THE SYSTEM, A MINIMUM OF THREE ADULTS ARE REQUIRED FOR THE FOLLOWING STEPS

STEP1

- A. Slide a 18mm Thick Washer (U3) over each of the J-Bolts(U2) as shown in FIGURE 1A.
- B. Remove the Padding from Main Post (A). Place the Main Post (A) over the J-Bolts. Slide a 18mm Thick Washer(U3), a Lock washer M18 (U6) and thread a 18mm Hex Nut (U4) to each J-bolt. Tighten the Nuts only a few turns onto the J-Bolts as shown in FIGURE 1B.
- C. If the Main Post (A) is not exactly vertical, adjust the 18mm J-Bolt Hex Nuts(U4) located under the Post base. Tighten all of the Hex Nuts(U4) Above Post base when Main Post(A) is vertical.

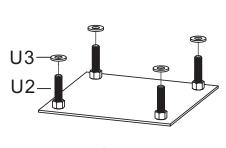


FIGURE 1A

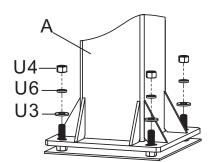
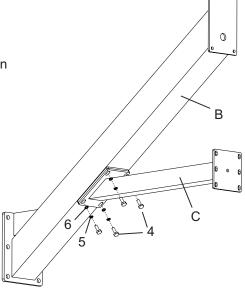


FIGURE 1B

STEP2

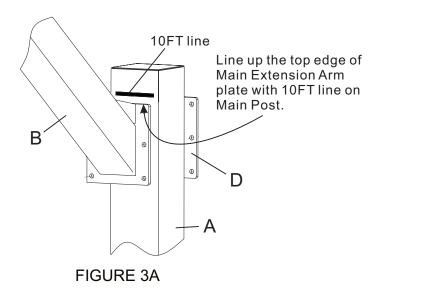
A. Tight the Small Extension Arm (C) to Main Extension Arm by using 4pcs M10 x 30mm Hex Bolts (#4), 4pcs Flat Washer M10 (#6), 4pcs Lock Washer M10 (#5).

Do not tighten at this time.



STEP 3

- A. Position the Main Extension Arm (B) to the Line on Main post (A) as shown in Figure 3A.
- B. Connect Main Extension Arm (B) to Main Post (A) with one Extension Arm Plate (D), using 6 Hex Bolts M16x200mm (1), 12 Flat Washer M16 (#2), 6 Lock nuts (#3). See Figure 3B.



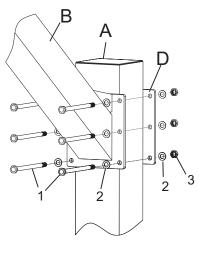


FIGURE 3B

STEP 4

A. Remove the nuts and washers from preinstalled bolts on backboard frame.

Connect Backboard frame to Extension Arm Assembly (B&C) using removed nuts and washers. 2. Attach backboard frame to Main Extension arm using removed nuts and washers. 1. Remove the nuts and washers from preinstalled bolts on backboard frame E-Backboard Frame 3. Attach backboard frame to Small Extension arm

using removed nuts and

В

STEP 5

- A. Insert 4pcs Spacers (Plastic & steel) (G) to the 4 holes in Backboard Glass.
- B. Remove the screws on Rim spring box cover, open the Spring box. (Rim Spring Box cover may not be factory-assembled.)

Slide 4 Carriage bolts M10x70mm (R1-rim hardware kit) thru Rim plate, Spacers and Backboard, secure with 4 Flat washers M10 (R2-Rim hardware kit) and 4 Flange nuts M10 (R3-Rim hardware kit) from the backside of Backboard.

C. Re-attach Spring box cover to the Rim with removed screws.

NOTE: Use a level to make sure rim is level side to side before tightening nuts.